HOW DO THE ATTITUDES AND BELIEFS TOWARDS MENTAL HEALTH-SEEKING BEHAVIOUR DIFFER BETWEEN RACIALIZED AND NON-RACIALIZED STUDENTS IN A UNIVERSITY ENVIRONMENT?

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Abstract

The purpose of this research study was to explore the perceptions of racialized and non-racialized students at York University's Keele campus towards seeking help for mental health problems. A convenience sample consisting of 491 students participated in the cross-sectional survey. The majority (n = 413, 84.1%) were identified as Canadian racialized, mainly Asian, South Asian, Caribbean, Middle Eastern and African students. The remainder (n = 78, 15.9%) were Canadian non-racialized, (English, French, Italian and Portuguese) students identifying with dominant Canadian culture. Most of the students (n = 77.4%) were female. All of the participants completed the Attitudes Toward Seeking Professional Help Scale; Beliefs About Psychological Services Scale; Vancouver Index of Acculturation; Race-Related Events Scale; Centre for Epidemiological Studies Depression Scale, and the Beck Anxiety Inventory. Attitudes and intentions toward seeking help were more negative among the racialized students. A higher level of stigma was also a predictor of negative attitudes and lower intentions towards seeking mental health counseling amongst the racialized group. Stigmatization among the racialized and non-racialized male students was higher than among the female students. The older racialized students tended to have higher positive scores for attitudes toward seeking help than younger students. Attitudes toward seeking help were more positive among the students who lived with their families. Previous mental diagnosis was also a significant predictor of attitudes toward seeking help. Very few racialized and non-racialized students used the counselling services or the online information system at York university to obtain information on mental health issues. The findings of this research study advocate university governance, healthcare professionals, and counsellors need to improve their services to address the specific needs and concerns of racialized students. Future research should focus on how findings can be translated into practice by designing

culturally adaptive treatment modalities, including electronic media, that focus on resolving mental health problems among racialized and non-racialized students.

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List of Abbreviations

Attitudes Toward Seeking Professional Help Scale (ATSPHS)

Beck Anxiety Inventory (BAI-II)

Beliefs about Psychological Services Scale (BAPS)

Canadian Association of College and University Student Services (CACUSS),

Canadian Mental Health Association (CMHA)

Centre for Epidemiological Studies Depression Scale (CES-D)

Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)

Electronic Public Mental Health Information (EPMHI)

General Help Seeking Questionnaire (GHSQ)

Race-Related Events Scale (RES)

Social and Cultural Determinants of Health (SCD)

Social Determinants Health Theory of Planned Behaviour (SDHTPB)

Social Determinants of Health (SDH)

Theory of Planned Behaviour (TPB)

Vancouver Index of Acculturation (VIA)

World Health Organization (WHO)

World Mental Health International College Student Project (WMHICSP)

Chapter 1: Purpose and Background of the Study

Purpose of the Study

This research study explored the factors associated with the attitudes and beliefs concerning racialized and non-racialized students' mental health help-seeking behaviour. The study focused on racialized university students at York University, because insufficient research has been undertaken in Canada to highlight the concerns of racialized students who do not seek mental health services. The primary justification for this research study was that a high proportion of students (13% to 18%) suffer from mental health disorders, including depression, anxiety, and stress (Canadian Community Health Survey-Mental Health, 2012). According to the Organisation for Economic Co-operation and Development countries OECD (2011), Canada was reported to have the third highest suicide rate internationally among male youths, which included university students in the developed countries. Price, McLeod, Gleich, and Hand (2006), found that the rate of depression among students at Canadian universities was similar to that of the United States, meaning that a high proportion of first-year university students (7 to 14 %) met the criteria for major depressive disorders.

The second reason for focusing on racialized students seeking help for depression, anxiety and stress at York University is that Canada has recently witnessed an enormous increase of immigrants from South East Asia, the Caribbean, the Middle East, Africa, and Latin American countries. These immigrants and second-generation populations have become the majority population at York University (York, 2016). Few studies exist that examine the mental help-seeking behaviours of racialized students in a post-secondary institution in Canada.

The third reason for focusing on help-seeking behaviour of racialized students is because they may encounter the intersections of structural discrimination in their daily lives.

Experiences with both racial discrimination and stigma/shame related to mental health problems may create an intersection of double stigma (Gary, 2005). In an attempt to maintain their sense of dignity and respect, many racialized students may demonstrate their acculturation to the dominant Canadian concepts of not seeking help, a behaviour common to men (Ting & Wang, 2009; Leong, Kim, & Gupta, 2011).The stigma of seeking mental help is particularly prevalent among racialized immigrants in North America (Cepeda-Benito & Short, 1998; Loya, Reddy, & Hinshaw, 2010; Ting & Wang, 2009; Leong, Kim, & Gupta, 2011).

The final reason for conducting this study was to help improve the quality of professional mental health services for all students, but particularly for racialized students in Canada, especially in a university environment. This would be resolved by providing a better understanding of the factors that influence racialized and non-racialized students regarding their attitudes and beliefs toward the use of university mental health counselling services and other mental health resources. This is important, as effective professional mental health counseling services, including recently developed E-Mental Health technology (apps, social media, etc.), have been shown to create a positive feedback loop, reducing stress, anxiety, and depression, as well as increasing motivation, and enhancing the academic performance of students (Park, Chung, An, & Park, 2012).

Although universities have professional mental help services available on or off campus to help students cope with their personal and mental health problems, the number of campus suicides at universities has emphasized the need for better mental health services (Mills, 2010; Mowbray, Mandiberg, Stein, Curlin, Megivern, et al., 2006). The ability of mental health professionals to facilitate students develop coping skills may help to alleviate their mental health/emotional distress (Prat-Sala & Redford, 2010).

Ultimately, the findings of this research study may assist university administrators and mental health professionals to better understand how students perceive the professionals who provide psychological/counselling services at York University and other Canadian universities. These findings may facilitate to design healthier strategies to improve mental health services for depression, anxiety and stress for all students.

Background to the Study

Mental health has been expressed as situated on a continuum from positive mental health, to mental health problems, and mental illness as cited by the World Health Organization (WHO), (2010). This position is further supported by the Canadian Association of College and University Student Services (CACUSS), (2014) and by the Canadian Mental Health Association (CMHA), (2014). Positive mental health, "is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community," (WHO, 2010, para. 3). On the opposite side of the spectrum stands the construct of mental illness (WHO, 2010). Individuals classified as having a mental illness exhibit behaviours in which their personalities become disorganized, unexpected, maladaptive, and their experiences become extremely stressful (WHO, 2010; CACUSS, 2014; CMHA, 2014). The term "mental illness" is often conflated with disability (Bancroft, 2012; MacKean, 2011).

There is multiple social determinant of health issues that may create mental health problems of anxiety, depression and stress in a student life when engaging in the university environment (Dyson & Renk, 2006). University is often filled with excitement and new experiences for students. It is also the time of life when a developmental transition from youth to adulthood occurs, which some students experience as a sense of loss when

separating from communities, family and friends. This impact may be greater on immigrant and second-generation racialized students due to the discrimination and racism they may experience (Ahmad et al, 2007). University is an environment in which mental health problems (Costello et al., 2006), including depression, suicide, and substance abuse, combined with stress related to academic performance are likely to occur. Some of the factors that contribute to mental health problems in universities include: structural problems of confronting racism against racialized students; structural violence and public stigma; inadequate university counselling staff and limited hours of operation; the social determinants of living conditions; financial issues; food scarcity; personal career decision-making; developing independence; alcohol misuse; and personal academic demands (Costello et al., 2006; Watson, & Barr, 2006; Carpenter-Song, et al., 2010; Corrigan, Watson, & Barr, 2006).

Among those who experience mental health problems, research illustrates that students from racialized backgrounds are unlikely to seek help either from university counselling centres or mental health resources (Carpenter-Song, et al 2010; Corrigan, Watson, & Barr, 2006). The term racialized in this study symbolizes a practice of imposition and the social construction of the class of oppression of racialized groups in Canada (Galabuzi, 2018). Further, racialized identities are identified as those groups of people that have been socially and politically created as ‘‘racially’’ distinct. In addition, “they have prominent cultural elements, but they are mostly a manifestation of unequal power between groups” (Baum, 2006, P. 11). Thus, racialized identities are “historically and contextually specific characterized by malleability, flexibility and situationality. More importantly, racialized identities are shaped by power relations” (Ahmad et al, 2007, p. 796).

In contrast, European settler societies/immigrants English, French, German, Italian and Portuguese are positioned as non-racialized settler societies with privileges (Philips et al.,

2018) in Canada. These privileges are established through the socio-political system which allocates power, privilege and benefits inequitably among racial groups in Canada. Privilege is difficult to comprehend for those people born with an open door to power and the resources that go with that power (Praitt, Caldwell, & Zimmerman, 2017). As a result, non-racialized Canadians have a better opportunity to engage health care institutions due to their privilege of cultural safety, language, education, income and institutional safe guards (Praitt, Caldwell, & Zimmerman, 2017).

The number of racialized and non-racialized students on university campuses struggling with mental health problems, such as anxiety, stress and depression which may lead to self harm are on the increase globally, including in Canada**.** The World Mental Health International College Student Project (WMHICSP) surveyed students in 19 universities across eight countries (Australia, Belgium, Germany, Mexico, Northern Ireland, South Africa, Spain, United States). The WMHICSP study estimated that the correlation between depression, anxiety and socio-demographic factors and common mental health problems among first-year students was significant (Auerbach, et al., 2018).

The WMHICSP study determined that one-third of first-year students in these 19 colleges across 8 countries had at least one common DSM-IV anxiety, mood, or substance disorder (35.3% lifetime, 31.4% 12 months) (Auerbach, et al., 2018). The increase of students' mental health problems has become into a major global mental health problem. Many mental health problems manifest themselves between ages 18 and 24, which coincides with the average age of student admission in post-secondary institutions (Kessler et al., 2005; Storrie, Ahern, & Tuckett, A., 2010). Blanco et al., (2008) discovered that the mental health problems for which students receive treatment for while studying in university environments are increasing in severity. More importantly, in 2016 approximately 44,000 Canadian students within 41 universities responded to a survey that found approximately 1/5 were

undergoing immense anxiety, depression and other mental illnesses according to the National College Health Assessment (2016).

The problem of depression**,** anxiety and stress are further exacerbated by the demands to acculturate to the dominant Canadian society for many racialized students, particularly for recent immigrants. Both in the dominant non-racialized Canadian society and in many racialized communities, different cultural values and understandings of emotional independence and gender roles may lead these students to experience additional difficulties as they try to navigate the transition to life at university (Harper & Harris, 2010). Davies, Shen-Miller, and Isacco (2010), found resistance to utilizing mental health services among racialized men, suggesting that many "college men are in the midst of a health crisis" (p. 347).

As a result, academic impairment is one of the major consequences of anxiety, stress and depression. Hysenbegasi, Hass, and Rowland (2005), reported that diagnosed depression was associated with a decrease in student average of half a grade. Depression has led to increased risk of self-injury, dropping out, attempting or committing suicide, accumulating credit card debt, and other problematic behaviours (Adams & Moore, 2007; Gollust, Eisenberg, & Golberstein, 2008; Kisch, Leino, & Silverman, 2005). Depression has also been associated with increased consumption of tobacco and alcohol, physical inactivity, obesity (Strine, Mokdad, & Dube, 2008), as well as physical and sexual victimization of partners (Sabina & Straus, 2008). Before elaborating on the determinants of help-seeking behaviour, this chapter will determine the positionality of the racialized students at York University located in Toronto, the largest city in Canada, who are the subjects of this study.

Composition of Racialized People in Toronto Canada

Major shifts in the cultural and ethnic composition of Canada have increased concerns about racialized mental health issues, especially how mental health services are organized

and delivered (Davis, 2006; McKenzie, et al., 2016). Toronto, Ontario is known for its diverse population comprised of with many racialized groups. In the 2016 Census, the population in Toronto was reported as: European descent (47.7%); South Asian (12.6%); Chinese (11.1%); African Canadian-Black (8.9%); Filipino (5.7%); Latin American (2.9%); South East Asian (1.5%) South Korean (1.5%) and Arab (1.3%) (Canadian Census, 2016). Therefore, Toronto, Ontario has a significant population composed of racialized groups.

Racialization, Migration and Mental Health

In general, Canadian racialized groups use fewer mental health services than their non-racialized counterparts (Islam, 2013; Khanlou, 2003; Khanlou et al, 2008; Guruge et al, 2008; Munroe-Blum, Boyle, Offord, & Kates, 1989). In 2002, Statistics Canada conducted the first national survey of mental health and well-being of Canadians as part of the Canadian Community Health Survey: Mental Health and Well-Being (Statistics Canada, 2002; CACUSS, 2013). This survey provided the first compilation of data concerning the occurrence of mental health problems, their association with individual determinants (e.g., sociodemographic factors, psychological distress, self-rated health, social support, barriers) and mental health service use across Canada (Statistics Canada, 2002).

Several researchers have documented specific problems in providing mental health services to racialized groups (Grace, et al. 2016; Khanlou, 2003a; Khanlou, 2010b, Williams, 2002; McKenzie, et al., 2016). Khanlou, (2003) confirmed the experiences of racialized groups, immigrants and refugees related to settlement plays a role in mental health and wellbeing. Additionally, acculturation stressors, economic uncertainty and ethnic discrimination all affect positive mental health (George et al., 2015; Khanlou et al 2008). Canadian research has confirmed that many immigrants and refugees have difficulty accessing mental health services (McKenzie, et al., 2016; Khanlou, 2003;

Khanlou, 2010). Key barriers include lack of awareness of the services available to immigrants and refugees; social and structural barriers (including health care expectations, racial stigma, and cultural incompatibility of services); settlement-related barriers (including low income, poverty and social exclusion); and the limited availability of services in languages other than English and/or French and reliance on under- funded racialized-specific agencies to address mental health needs (Thomson et al., 2015; Khanlou, 2003).

Immigration policies of Canada, create major barriers for people with mental illness by denying admission to those who are assessed as likely to impose ‘excessive burdens ‘on the health system (Joseph, 2015; Livingston, 2013). Such policies reinforce stigma by devaluing people with mental illness, and by arbitrarily restricting rights and blocking opportunities (Livingston, 2013).

Further, the Canadian Task Force on Mental Health Issues Affecting Immigrants and Refugees (2016), postulated that Canadian governments have done little to address these issues. The systemic inequities and inequalities affecting cultural and racialized groups are apparent (Islam, 2013; Khanlou, 2003; Guruge et al, 2008). For example, systemic racism in Canadian society shapes the options and life chances of racialized groups, families and in particular youths as they become racialized students. (Islam, 2013; Khanlou, 2003; Guruge et al, 2008). Mental health counselling services typically function using Western concepts concerning mental health problems, and providers may not be sensitive to the cultural differences of their clients (Grace, et al. 2016; Hansson, et al. 2012; Khan, et al 2015). As a result, a racialized person may feel culturally unsafe in these help-seeking interactions.

Barriers Contributing to Low Help Seeking Behaviour

There are many variables that act as barriers contributing to the under-utilization of mental help-seeking behaviour among racialized students. These barriers function at the structural, community and personal levels. At the structural level systemic racism is the overarching barrier, which then plays out at the community, institutional and personal level. Further, racism and acculturation, expertise of professionals, stigma, race-related stress, sex/ gender roles, age, cultural and religious beliefs may act as barriers to help-seeking behaviour for racialized students. For non-racialized student gender and age may act as significant barriers to help-seeking behaviour in this study.

Systemic Racism

Institutionalized racism is defined as, "differential access to the goods, services, and opportunities of society by race" (Jones, 2000, p. 1212). Institutionalized racism becomes structural when it is normalized and codified into institutions. Jones (2000), developed a framework for understanding racism at three levels: institutionalized, personally mediated, and internalized. As such, when discussing barriers that contribute to low help-seeking behaviour for racialized groups, systemic racism is the overarching barrier that plays out in the specific ways described below. The barriers explored below are the most relevant to the current study and also those most often discussed in the literature (Gary, Yarandi and Scruggs, 2003; Gary, 2005; Paradies et al., 2015; Sam & Berry 2010; Hwang & Ting, 2008; Mikolajczyk, Bredehorst, Kheilalfat, Maler, & Maxwell, 2007; Potochnick & Perreira, 2010; Javier, Lahlff, Ferrer, & Huffman, 2010).

Racism and Acculturation

Acculturation encompasses how people adjust to a new culture, language and environment and has been linked to health and mental health problems due to structural racism (Berry, 2006). Balls Organista, Marín, and Chun (2010, p. 105), define acculturation

stress as, “a dynamic and multidimensional process of adaptation that occurs when distinct cultures come into sustained contact.” People experience different degrees and instances of integration with the mainstream culture and maintenance with the heritage culture contingent upon individual, group, and environmental factors. Acculturation can lead to problems experienced by racialized students. Some students may experience the ending of links with their country of origin and the loss of personal status, income, employment and social networks. In addition, trying to retain the cultural values of the native country, while attaining compatibility with the host culture can be challenging for recent immigrants and foreign students at universities (Sam & Berry, 2010; Hwang & Ting, 2008; Mikolajczyk, Bredehorst, Kheilalfat, Maler, & Maxwell, 2007; Potochnick & Perreira, 2010; Javier, Lahlff, Ferrer, & Huffman, 2010).

For university-aged racialized students, researchers have also noted other difficulties (Sam & Berry, 2010; Hwang & Ting, 2008; Mikolajczyk, Bredehorst, Kheilalfat, Maler, & Maxwell, 2007). These difficulties vary depending on whether the racialized student is Canadian-born or a recent immigrant. For Canadian-born racialized students, the issues include intergenerational family conflict and handling discrimination associated with racialized status (Khanlou, 2003). Some issues racialized immigrants face include: identity confusion; adapting to a different educational and political system; adjusting to new social norms and coping with feelings of isolation and disconnection (Potochnick & Perreira, 2010; Javier, Lahlff, Ferrer, & Huffman, 2010).

Expertise of Professionals

Few studies have analyzed the attitudes of people towards the expertise of professional mental health services. Aegidottir & Gerstein (2012), analyzed the attitudes of people in the United States and Europe toward the so-called “expertness” of psychological services using the Beliefs About Psychological Services (BAPS) Scale. Beliefs were

measured as a combination of intention to seek help, plus stigma, and the expertness of professionals. The latter was measured with statements such as “Because of their training, psychologists can help you find solutions to your problem” and “Psychologists provide valuable advice because of their knowledge about human behaviour” (Aegidottir & Gerstein, 2012, p. 18). The study showed that once negative attitudes and fears about counselling were addressed among college males, they were more likely to seek professional help. Fischer & Shaw (1999), and Hartong (2011), similarly found that prior experience of counselling and female sex were predictive factors of positive attitudes towards seeking help.

However, racial beliefs and stereotyping in the mental health professions (i.e., counsellors, psychology, psychiatry) are regularly assumed to be persuasive determining factors in intake, assessment and diagnosis and misdiagnosis in a community and/or university environment for students. (Across Boundaries, 1997; Bui, et al., 1992). Unfortunately, racialized groups/students are frequently misdiagnosed with mental health problems (Bui, et al., 1992). This process may result in a deferred intervention and help-seeking may be delayed for unnecessarily long periods. Mental health professionals may require further psycho-cultural formal training to enhance their understanding of social/cultural determinants, racism, intersection of stigma, sex issues, and other social determinants of health differences related to racialized groups and students (Across Boundaries, 1997).

Stigma and Race-related Stress

The concept of stigma, advanced by Goffman (1963), is understood as a phenomenon that ostracizes a person from his or her society on the basis of a particular attribute, for example, mental illness or race. Link, Struening, Neese-Todd, Asmussen, and Phelan, (2001) define stigmatization holistically, as a combination of labelling, stereotyping, separation, status loss, and discrimination. Stigmatization occurs when a person is labelled as socially

different from everyone else, linked to inauspicious characteristics. Stigma of mental health and illness intersects with racism, leading to compounding impacts (Chong, et al., 2007; Chowdhury, et al., 2001). From many disciples (psychology, psychiatry) stigma as it relates to mental illness, is often used as a psychometric measure. Further, it is defined as a cognitive-behavioural construct, which manifests in the following ways: (a) public or social stigma; (b) self-stigma; (c) label avoidance (Corrigan & Wassel, 2008); and (d) personal stigma (Griffiths, Christensen, Jorm, Evans, & Groves, 2004). Public or social stigma refers to the general negative stereotyping of people who suffer from a mental illness. Societies and communities may respond to people who seek or receive help for mental health distress by stigmatizing or stereotyping them. Stigma may involve discriminating behaviours against the stigmatized individuals or in some instances, increased awareness of the responses to people with mental disorders or those who seek mental health services (Corrigan, 2004). People with mental illness may be viewed as dangerous, embarrassing, socially disagreeable, and even responsible for their own illnesses (Corrigan, Watson, Warpinski, & Gracia, 2004). Social stigma associated with seeking or receiving psychological help does not only affect those diagnosed or perceived as mentally ill. Corrigan et al., (2004), suggest that stigmatization extends to family members because of the way others erect social barriers against the families of mentally ill people. They further explain that the behaviours of people with severe mental illness may also moderate the family's status and jeopardize relationships with friends and neighbors.

The idea of self-stigma posits that awareness and endorsement of public/social stigma generates self-stigma (Corrigan & Wassel, 2008). Self-stigma occurs when an individual internalizes public stigma, resulting in reduced self-esteem, lower self-efficacy, underachievement, and avoidance of growth and independence. Vogel, Wade, and Haake (2006), suggest that when diagnosed with a mental illness, people absorb cultural ideas and

stereotypes that have been linked with the mental illness and those ideas become personally relevant and promote self-stigma. Self-stigma correlates with depression and unwillingness to seek help (Corrigan, Watson, & Barr, 2006). Mental health stigma intersects with experiences of racialization and culture. As such, stigma may trigger stress and defensive behaviours by racialized students to prevent rejection and withdrawal from the community, including label avoidance and not seeking help when suffering from a psychiatric condition, to escape judgment and discrimination. In contrast to self-stigma, personal stigma refers to the negative attitudes towards those with mental illness from people who do not necessarily have a mental illness, or are not yet aware they have one (Eisenberg, Downs, Golberstein, & Kivin, 2009).

Gary, Yarandi and Scruggs (2003), and Gary (2005), considered how the overlapping factors such as race, class and gender that racialized students experience as intersecting factors compound the experience of mental health stigma, leading to further stress. The experience of multiple stigmas can lead to negative attitudes towards mental health help-seeking behaviour.

Stigma or stigmatization acts as a barrier to the use of mental health services by racialized university students in the United States (Eisenberg, Downs, Golberstein, & Kivin, 2009). A distinction exists between stigma by virtue of being from a racialized group and stigma from having mental health issues; both create a barrier to racialized students from seeking help. Once individuals, especially racialized individuals have been stigmatized through mental illness labels, the foundation has been established for them to feel devalued and excluded from mainstream society. Furthermore, stigmatization may cause further anxiety, depression and paranoia. The stigma of receiving a psychiatric "label'' may act as a stressor, impairing psychiatric symptoms or impeding recovery (Ting & Hwang, 2010). Accordingly, stigma plays an essential role in the present study as an important predictor

variable for attitudes toward seeking help for both racialized and non-racialized students**.** Empirical evidence suggests that high levels of stigma associated with negative attitudes predict low use of mental health services for racialized groups. Personal or internalized stigma related to having a mental health issue negatively correlates with intentions to seek medication or therapy (Eisenberg, Marilyn, Ezra, & Zivin, 2009). Barney, Griffiths, Jorm, and Christensen, 2006), found a negative correlation between self-stigma, public stigma, and help-seeking attitudes. Several surveys have revealed that people with significantly high levels of self-stigma are less likely to seek professional services than those with significantly low levels of self-stigma (Vogel et al., 2006**)**.

Gender (Sex Men/Women Roles)

Another factor to be considered in the context of help seeking is gender. Gender role conflict is a psychological state underpinned by Social Role Theory (Eagly, 1987), which posits that women and men validate both dominant and cultural gender stereotypes because they act in accordance with different social roles. Racialized men from various ethnic backgrounds tend to have a lower rate of mental health care utilization than racialized women (Wang et al., 2007). These roles include stereotypical ideas that men should be emotionally strong and be the breadwinners of the family, while women express emotions more freely and are responsible for families in both racialized and non-racialized societies. Women and men behave in gender-typed ways because the social roles that they perform are associated with different expectations and require different skills (Chan, 2013).

Men may experience social sanctions based on gendered stereotypes, such as “boys don’t cry,” and may hide their feelings because they fear public stigmatization (Vogel, Heimerdinger-Edwards, Hammer, & Hubbard, 2011). Traditional masculine norms require that men be self-controlled and self-reliant, behaviours which discourage them from seeking help (O’Neil, 1986). Social attitudes in dominant Western societies, including Canada,

toward men's gender roles can cause both physical and psychological stresses (Vogel, Heimerdinger-Edwards, Hammer, & Hubbard, 2011). Many men may feel caught in a storm of contradictory messages about the meaning of masculinity and how they should behave (Blazina & Watkins, 1996; Addis & Cohane, 2005). The consequences of gender role conflict can impact not only the well-being of men, but also that of women, children, and society at large. Gender role conflict has been associated with higher levels of alcohol abuse, anger, anxiety, and depression, and lower levels of relationship satisfaction and intimacy (Blazina & Watkins, 1996; Addis & Cohane, 2005). Men who experience higher gender role conflict are more likely to engage in high-risk sexual activity (Courtenay, 2000), and report low levels of job satisfaction (Dodson & Borders, 2006). McDowell (2002), suggested that a crisis in masculinity has occurred, rooted in outdated attitudes, job insecurity, male emotional detachment, and changing family roles and structures.

In the context of the current study, gender roles in men, women and other conflict are an important risk factor for mental health problems for racialized students. Male students who acculturate to the dominant Canadian society and its norms of masculinity tend to seek less mental help. Good and Wood (1995), suggest that men suffering from mental health problems, such as depression, experience jeopardy through the intersection impact of race, gender and mental health diagnosis. The gender/sex role conflict may increase depressive symptoms; but at the same time, it also decreases the likelihood that they may seek professional help for their mental health. Mahalik and Rochlen (2006), used a vignette to explore men's attitudes about depression. After the participants read the vignette, describing an episode of major depression, the male participants rated how much they would engage in help-seeking behaviour. The results indicated that most of the participants would only reluctantly seek professional help for depressive episodes. They preferred talking with

partners and family members or waiting for change (Mahalik et al, 2006). Men were also more likely to engage in self-medicating behaviours (Mahalik et al, 2006).

To preserve their sense of dignity, by refusing to admit that they have mental health problems, racialized men may confirm dominant masculine roles by not seeking help (Leong, Kim, & Gupta, 2011). That is, racialized men mimic the dominant non-racialized male culture and their own beliefs about gender to avoid seeking help, which is seen as a weakness.

Racialized women comprise a large, heterogeneous group, varying by language, geographic allocation, religion and patterns or similarities in their post-migration experiences. However, among these groups, family needs and traditions are often considered more important than their personal needs; when a woman puts her personal needs ahead of those of her family, her behaviour may be considered selfish and "westernized" (Das et al., 1997; Chan, 2013). Thus, culture and gender play an important role in the arrangement of family life for racialized women. Female gender roles are also shaped by centuries of tradition (Das et al., 1997; Chan, 2013). The different, yet valued structure of family and female roles in racialized cultures, is important to understand; many women strive to maintain these values after migration (Das et al., 1997; Chan, 2013). Their roles in family life also help shed light on how they perceive mental health and appropriate care. Negative perceptions of mental health, stigma, and shame are still associated with suffering from any kind of mental health problem (Gee, et al., 2009). As a result, young racialized women are in the intersection of multiple jeopardy with respect to help-seeking behaviour. Not only are their mental health issues closely connected with the cultural stigma of inadequate womanhood or motherhood, but they also generally decline to seek help from either formal or informal sources (Komiya, Good, & Sherrod, 2000; Chowdhury et al., 2001; Ting & Hwang, 2009; Paniagua & Yamada, 2013; Wang, Lin, Pang, & Shen, 2007). In summary, help-seeking behaviour is mediated by

both racialization and gender. This combination can prevent both men and women from seeking help for mental health problems and lead to under-utilization of services. Due to hegemonic masculinity in both the racialized and non-racialized cultures, the effect is even greater for men of all ages.

Cultural and Religious Barriers

Persons belonging to Asian cultures (i.e., Chinese, Korean, Japanese, Vietnamese and South Indian), in Western counties (i.e. United States, Canada), often delay initiating mental health interventions (Wang, Lin, Pang, & Shen, 2007). As a result, this may limit the effectiveness of the treatment and cause more shame to the family (Wang, Lin, Pang, & Shen, 2007). For racialized students, family care and support from religious beliefs are perceived as more important than professional mental help to maintain mental well-being (Chan, et al., 2010; Chong, et al., 2007; Chowdhury, et al., 2001). Research on racialized groups (Paniagua & Yamada, 2013; Wang, Lin, Pang, & Shen, 2007; Rao, Feinglass, and Corrigan, 2007) suggests similar cultural trends: (a) the participants exhibited negative attitudes towards psychological mental help services; (b) family and friends exerted a strong influence on the decisions participants made in relation to seeking professional help; and (c) the infrastructure of communal living and the religious dimension of collectiveness met the emotional needs of the participants, providing an outlet for their distress in the absence of professional mental health services (Al-Rowaie, 2001; Lipson & Meleis, 1983*;* Mori, 2000).

Age

Several scholars (Rickwood, Deane, & Wilson, 2007; Zachrisson, Rodje, & Mykletun, 2006), found age disparities in help-seeking behaviour for mental health concerns, especially in young people between the ages of 18-25. Students, whether racialized or non-racialized, especially in the age range between 18-25, are at the highest risk of having mental

health issues were associated low help-seeking rates (Rickwood, Deane, & Wilson, 2007; Zachrisson, Rodje, & Mykletun, 2006). This suggests a negative link between age and help-seeking behaviour for mental health issues informed by different attitudes towards mental health.

Barker et al., (2005), distinguished between structural and personal determinants of young people's help-seeking behaviour. They affirmed that personal factors, such as personal beliefs, internalized gender norms, coping skills, self-efficacy, and perceived stigma, interacting with structural factors, including the university mental health system, accessibility and availability of services, play a significant role in not utilizing help-seeking behaviour (Barker et al., 2005). Furthermore, for young adults in the age range of 18-25, the fear of breaches of confidentiality and lack of trust may relate to the fear of public stigma (Rickwood, Deane, & Wilson, 2007). This may create embarrassment, shame and loss of face in front of peers and friends (Barker et al., 2005). However, some evidence confirms that positive past experiences, social support and encouragement from family members, and family doctors are often the preferred sources of help over mental health professionals for this age group (Rickwood, Deane, & Wilson, 2007; Zachrisson, Rodje, & Mykletun, 2006).

Facilitators of Help Seeking Behaviour

Social support**,** experience and access to electronic public mental health information may facilitate help-seeking behaviour. Support from residing on the university campus, friends and family members and spousal partner may encourage help-seeking behaviour. Several researchers (Vogel et al., 2007; Chadda, et al., 2001; Gulliver et al., 2010; Gulliver et al., 2012), postulate that most people, including racialized and non-racialized students who engaged in therapy for mental health care, accept professional mental health help more

readily when a designate (mother and/or wife) advocates on their behalf. Therefore, social support and positive reinforcement facilitate mental health help-seeking behaviour.

Marital status is a salient correlate in people's help seeking behaviour. Hence marital status/co-habitation may be less of a barrier than a predictor of need (Vogel et al., 2007; Chadda, et al., 2001; Gulliver et al., 2010), especially for graduate students. Marriage and coexisting residing with someone may be predictors of the most instrumental determinants of physical and mental care amongst racialized students. This strengthens the relationship between traditional health beliefs and practices and the access to both health and mental health care utilization.

Experience of seeking either formal or informal mental health help may increase the likelihood of students seeking help in the future (Jorm et al., 2000). Jorm et al., 2000) and Surgenor (1985), suggest that a person who has pursued treatment for depression previously will have a more positive attitude toward seeking treatment in the future. Positive attitudes towards seeking help result in a greater perceived need for treatment, mindfulness of stigma, and further confidence when seeking help for mental health**.** Conversely, research studies also indicate that people who had adverse experiences of treatment may be less likely to seek treatment for succeeding mental health issues (Skogstad, Deane, & Spicer, 2006). Most research concludes that past experiences of help-seeking enlighten the clients' beliefs in treatment and result in an increased likelihood of seeking treatment again (Prakask, et al, 2013; Carpenter-Song et al, 2010; Farrell et al, 2008)**.**

The facilitators of mental health help seeking behaviour may also include medical professionals, electronic mental health information, and religion. Racialized students and their families prefer to visit a family doctor rather than a mental health professional when they initially experience emotional distress (Prakask, et al, 2013; Carpenter-Song et al, 2010; Farrell et al, 2008; Ross, & Caper, 1969). Racialized groups often express

emotional distress through physiological symptoms and therefore seek physicians for their somatic worries in relation to depression and anxiety (Prakask, et al, 2013). Through this process, public and self-stigma are minimized, especially in a racialized environment.

Electronic public mental health information has become increasingly popular. Research shows that young people of all racial backgrounds accept electronic public mental health information (EPMHI) as a sources of health information (Burns et al., 2010; Christensen & Hickie, 2010a, 2010b). Because of their childhood experiences with technology, most students between the ages of 18 to 25 years are integrated with EPMHI technologies (Christensen & Hickie, 2010a, 2010b). In a recent survey, 39% of students and young people reported using the Internet to seek information about a mental health problem (Mackay, 2014). EPMHI technologies may also improve the well-being of young people by supporting the development of mindfulness (Burns et al., 2010; Christensen & Hickie, 2010a, 2010b). Seizing the potential of EPMHI, national and global-level organizations have initiated a health care paradigm shift and a mHealth explosion. EPMHI increases information access, supports the development of related digital tools, and shifts attitudes from the traditional patient-provider model to one of patient-centred care (Burns et al., 2010; Christensen & Hickie 2010a; 2010b). An Australian study reported that 88% of its survey respondents use websites or apps on their mobile phones and predicted that 92% of respondents would own a smartphone by October 2015 (Mackay, 2014). According to Burns et al. (2010), most young people use smartphones; the Australian Communications and Media Authority reported that in May 2013, 89% of people aged 18-24 years had a smartphone and 83% of this age group downloaded an app in the previous six months (Christensen & Hickie 2010a; 2010b). Studies investigating the effectiveness of mHealth-self-help interventions among young people have been evaluated mostly in student settings in the United States and Australia, and more recently, in Europe (Christensen & Hickie,

2010a; 2010b). In a research study conducted by Carey and colleagues (2009), they found that EPMHI- computer-based interventions had a positive impact on student alcohol consumption as compared with no-intervention controls. In a recent systematic review, this favourable impact also showed the effectiveness of online programs to address problem drinking among university students (White et al., 2010).

The Evolving Nature of Mental Health Policies in Canadian Universities

The Canadian education system was founded upon the British custom and common law of "loco parentis" from the earliest days of the British North America Act, 1867. Historically, the governance of the education system was the responsibility of provincial governments and local school boards. The concept of "Loco parentis" is rooted on the deep-seated central authority of educational institutions, affirming that schools (including universities) take the role of parents for the students who are assigned to their care (Lewis, 1983; Ontario Ministry of Education, 1994). In its practical application, public schools and university administrators should advocate for their students' best interest and welfare (Lewis, 1983; Lee, 2011). Therefore, this doctrine allows schools and universities to assimilate mental health resources into their institution (Lewis, 1983; Lee, 2011).

Currently, the Canadian Association of College and University Student Services and the Canadian Mental Health Association recognize that institutional policy is one of the central elements of campus mental health. Institutional policies model campus ecosystems by laying down the foundation of university beliefs, values and behaviours, while discouraging others (CACUSS & CMHA, 2013).

Olding & Yip (2014), indicate that two spectrums of policy design relate to mental health in universities. The first is the "individual" spectrum, more reactive by nature, which addresses mental health in regard to an individual student's needs for accessibility,

accommodation, medical leave, re-entry, privacy and confidentiality. These policies support students in immediate distress and at risk for mental health problems (Olding, & Yip, 2014; Price, 2011). The second are policies designed on the "universal" spectrum, which result in wider guidelines and configurations that support all students towards positive mental health through fair and flexible processes, grading and conflict resolution, navigating institutional process and systems, promoting inclusive curriculum and pedagogy, institutionalizing anti-discriminatory and anti-stigma policy (Price, 2011). As a result, policies may facilitate or obstruct reliable modes of education, linking and thriving within a university, and empowering student physical and mental well-being. Therefore, mental health policies represent an official institutional directive by the Senate administrators to develop guidelines, principles, responsibilities and ensure compliance with rules and regulations within a university environment.

A review of 23 existing mental health polices in universities in Canada indicates that policy inequalities currently exist, especially with respect to leave/withdrawal policy as it relates to mental health (Olding, & Yip, 2014). Students facing mental health complexities often are supported through temporary leave, but unfortunately, frequently various administrative/institutional barriers prevent students from taking this leave and/or returning to university**.** In addition, mismatched policies associated with practices for safeguarding student confidentiality around health/mental health information surround the provincial legislation process.

Mental Health Policies at York University

York University historically adopted the traditional *loco parentis* model for policy. However, in 2013 a racialized student (Dhanota) challenged York University over student access to mental health services. She challenged the idea that students should disclose (through

professional notes from psychiatrists) their mental health status to gain accommodation. In 2016, with the support of Ontario Human Rights Commission (2014), and the ARCH (2014), Disability Legal Clinic, Dhanota facilitated changes to the York University policy to protect the privacy of students requiring mental health accommodations. That is, students no longer need to disclose mental health diagnoses to obtain accommodations. Instead, they must submit a medical note from their attending physician. As a result, York University refocused from a paternalistic, traditional mental health (*loco parentis***)** model, to an accommodation model that gives students more control over their mental health records (Rider, 2013). Thus, at the individual level, York University students with mental health challenges can access support through student accommodations, without needing to disclose their diagnosis. More importantly, these guidelines apply to all future incoming York University students.

At a universal level, York University has recently undergone institutional consultations with faculty, students, and staff, resulting in the development of a mental health strategy (Mental Health Strategy Advancing a Mentally Healthy Campus, 2015). This strategy fosters mental well-being across the campus, in addition to the individual accommodations available. However, the plan needs more support and a more robust social determinants approach to mental health to address the concerns of the largely racialized student population. According to the Policy Approach to Post-Secondary Student Mental Health, "What is needed here [universities] is a social determinant of health perspective to readdress some of the mental health problems" (Olding, & Yip, 2014, p. 22). The present study provides tools to measure and address some social determinants to better understand student mental health help-seeking behaviour at York University.

Instruments and Help-Seeking Behaviour

The question of what factors influence a student's attitudes towards seeking professional mental health help (from psychiatrists, psychologists, university counsellors, and social workers) to alleviate their depression and stress has been an important area of research in social science for more than 30 years. Widespread interest in this topic has arisen because understanding the help-seeking attitudes of different groups of students helps to better comprehend the determinants of mental health of student populations. Several researchers in Canada and the United States (Azjen & Manstead, 2007; Mills, 2010; Wilson, Deane, Ciarrochi, & Rickwood, 2005), have found that variables such as age, gender, education and stigma, contribute to the underutilization **o**f professional help. However, few if any, researchers in the Canadian context have looked specifically at the help-seeking behaviour of racialized students compared to their non-racialized counterparts. Many self-reporting instruments measure the attitudes that people with mental health problems have towards seeking professional help. The instruments used in this study, in chronological order are: the Descriptive Socio Demographics of the Student population; the Attitudes Toward Seeking Professional Help Scale (Surgenor, 1995); Beliefs About Psychological Services Scale (Aegisdottir, & Gerstein, 2009); Vancouver Acculturation Index (Ryder, et al, 2000); Race Related Events Scale (Waelde, et al, 2010); Centre for Epidemiological Studies Depression Scale (Radloff, 1977); the General Help-Seeking Questionnaire (Wilson, Deane, Ciarrochi & Rickwood, 2005); and finally, the Beck Anxiety Inventory, second edition (BAI-II; Beck, Epstein, Brown, & Steer, 1988) were utilized.

This research utilized the instruments listed above and descriptive data in a cross-sectional survey to measure, explore, and predict the attitudes toward the use of mental health help-seeking for depression and anxiety among the student population of York University, with a specific interest in racialized students. By integrating the multi-disciplinary

frameworks of Social and Cultural Determinants (Lee et al., 2007, and Meyers 2003), Social Determinants of Health (Raphael, 2007), and the Theory of Planned Behaviour (Ajzen & Manstead 2007), (explained in Chapter 2) this research investigated the complex personal (Islam, 2013; Khanlou., 2003) and social (Bathje & Proyor, 2011; Fischer & Shaw, 1999; Hartong, 2011) determinants that influence racialized students' decisions not to seek help when faced with depression and anxiety.

Positionality of the Researcher

The researcher is of South Asian background and a graduate PhD candidate at York University in Ontario, Canada. His family migrated to Canada several decades ago from the Pacific Island of Fiji. He has personally encountered racism, at work and at all levels of education from secondary to post secondary education institutions. As a mental health clinician, the researcher has observed and engaged racialized and non-racialized students (18-35) experiencing stigma, stress, anxiety and depression. Finally, the researcher has been a co-investigator on the Strength in Unity Project (Movember Foundation Funded-2014-2018) which was designed to address mental health stigma among men in Asian communities.

Summary

The current study focused on racialized university students at York University in Canada because insufficient research has been undertaken to highlight their problems in seeking and accessing mental health counselling services. Canadian citizens who identify as racialized students in Canada often lack, social, economic and political control over their physical and mental health. That is, the social determinants of racism and ethnocentrism limit how racialized groups access services and/or impact their experience of those services. Therefore, these experiences can generate adversity towards help-seeking behaviour in their future positions at work or in university environment.

Although many instruments have been developed to measure the attitudes of participants toward seeking psychological help, this study also considers the age of migration, cultural-norms, values, beliefs, and the specific experiences of students at York University. Mental health counselling programs on university campuses should focus on implementing new voices of electric and cultural safety mental health programs to facilitate effective help-seeking behaviour.

Studies conducted in other countries have consistently revealed that many individuals who could potentially benefit from mental health services do not seek help or follow-through with treatment in a university environment. This makes it important for Canadian researchers to recognize some of the hindrances to seek counseling or any other related mental health services within university counseling centres. An integrative framework is required to facilitate a better understanding of help seeking behaviour at a university by racialized groups.

Chapter 2: Theories & Models:
Integrative Approach to Help-Seeking Behaviour & Development of The Social Determinants Health Theory of Planned Behaviour (SDHTPB)

Introduction

Many policy makers in the health and mental health fields have sought to develop explanatory models and theories to understand help-seeking behaviour. This knowledge is meant to assist health/mental health professionals, policy makers, researchers, and lay persons in understanding how and when a person utilizes health care for health and mental health needs. A significant amount of research has highlighted the prevalence rates of mental health problems in the general Canadian population and among racialized groups (i.e., Asian, African Canadian, Middle Eastern, South Asian etc.). However, utilization of mental health services varies according to power relations based on positionality related to race and ethnicity – with research suggesting that racialized minorities under-utilize mental health services (Abe-Kim et al., 2002; Vogel & Wei, 2005). Further, most of the theories and models reflect Western values, the experiences of the dominant non-racialized population, and are based on the principles of individuality. These help-seeking theories lack an analysis that considers the structural, social and cultural determinants of health and mental health.

Review of Help Seeking Models/Theories

In order to understand health and mental health help-seeking behaviour, one needs to identify what constitutes a theory/model in a health environment. Theories and models, including health and mental health, illuminate behaviour and propose ways to attain behavior transformation. From a critical realist's perspective, theories are the instruments for enlightening in-depth knowledge of behaviour. Specifically, critical realism as meta-theory analyses beneath the core of events to the mechanisms that generate them (Sayer, 1992). In addition, critical realism emphasizes that the study of the social world should be concerned

with the identification of the structures and mechanisms through which behavioural experiences and dialogues are engendered (Baum, 2000).

Van Ryn and Heaney (1992), argue that theory is a set of interconnected concepts, definitions and propositions that present a methodical assessment of events or situations by identifying interactions between variables, in order to explain (i.e. explanatory theories) and/or predict (i.e. predictive theories) the events and situations. The predictive theories are also called change theories or implementation theories when the aim is to modify a behaviour or situation. More saliently the construct of generalizability and testability is paramount in both the explanatory and predictive change theories. While theories on the cause-effect mechanism for the development of certain health conditions exist, theories for the development of mental health conditions often remain less clear and complex. Scholars may present their theories or theoretical perspectives using visual diagrams, which are often called models. Consequently, one observes in the literature that the terms "theories" and "models" are utilized interchangeably (Glanz et al, 2008); therefore, the content and context of these terms have similar meaning in this study.

A comprehensive review of 23 help-seeking models and theories in the health literature confirmed that they were designed for health-seeking behaviour. Few of these models and theories were created for the purposes of mental health-seeking behaviour. More importantly these models and theories are especially created and developed for non-racialized groups. These model and theories are**:**

Sick Role Theory (Parson, 1951); Choice-Making Models (Young, 1981); Ecological Systems Theory Bronfenbrenner (1989); Network-Episode Model (Pescosolido 1992); The Willingness to Seek Help Scale (Hinson & Swanson, 1993);

Threats to Self-Esteem Theory; Reactance Theory; Attribution Theory; and Continuity Theory (Webber et al., 1994); The Attitudes and Intentions to Seek Professional Psychological Help Questionnaire (Deane & Todd; 1996); Personal & Emotional Model, (Dean & Todd, 1996); The Concept of Cycle of Avoidance (Pescosolido et al., 1998); The Willingness to Seek Help Questionnaire (Cohen, 1999); Cramer's Help-Seeking Model (1999); The General Help-Seeking Questionnaire (Wilson et al., 2005); The Self-Stigma of Seeking Help Questionnaire (Vogel, Wade, & Haake, 2006); The Beliefs About Psychological Services Scale (Aegisdottir & Gerstein, 2009) and The Attitudes Toward Seeking Professional Psychological Help Scale Short Form (Fang, Pieterse, Friedlander, & Cao, 2011).

The models and theories have a prolonged history of research that has been conveyed throughout wide-ranging fields, including researchers from medical healthcare, mental health and psychology, sociology and psychiatry. However, it seems that in these theories and models less attention has been given to structural-level issues, social determinants of health and intersections of race, gender and class with help-seeking behaviour. More insights in regards to help-seeking behaviour are required in particularly to facilitate a better understanding of how power relations play out in the help-seeking context for racialized groups.

Analysis of Help and Mental Health Help-Seeking Behaviour

This review has considered a wide and diverse range of factors that may affect seeking-help models and theories both racialized and non-racialized men and women students. The vast majority of 23 models/theories among both in health help-seeking and mental health-seeking behaviours reveal that little consensus has been achieved despite considerable research effort in this area. They also lack agreement or consistency in the

measurement of help-seeking behaviours. Consequently, research studies have uncovered diverse findings that are often inconsistent and contradictory in content and context.

Critical Realism and Social Determinant of Health frameworks insist on the contextualized health and healthcare seeking behaviour in a wider framework of inequality and power relationship discourses in a neo-liberal multicultural state of Canada. According to Razack (1994), Jiwani, (2001), Egan and Gardner (2004), racialized groups confront (structural) barriers within the broader psycho-political, economic, historical, and social in the existing structural inequalities of Canadian society. Further Varcoe, Hankivsky and Morrow (2007), emphasized the internal variations within communities based on gender, class, age, ability, and sexuality are salient determinant of health care and could deter racialized groups in help seeking. These researchers' correlate healthcare behaviour of people especially racialized groups as a power relation comprised by multifaceted intersectionality power relations and inequitable social relationships.

The determinants of mental health attitudes of students seeking towards practicing professional help to alleviate their depression, anxiety and stress have been an important problem underlying research in mental health/social science for 30 years. Widespread interest in this topic has arisen because understanding the help-seeking attitudes of different groups of students is fundamental to better understanding the determinants of mental health of the dominant student population. During a student's university life span, their university experiences may create an environment of stress, anxiety and depression. For some students this may be the first time that they are away from their intergenerational families, friends and social networks. Research shows that students are vulnerable to mental health-related problems such as stress, anxiety and depression. Typically, racialized students seek informal supports to avoid stigma, shame and services that are culturally inappropriate. Students seeking help from the university counselling centre may encounter power relations, structural

and social and cultural barriers. They might also encounter barriers related to the university environment and polices, lack of cultural safety, a dearth of mental health professionals, discrimination, immigration process, gender roles, stigma/shame, acculturation stress, the burdens of racism and gender conflict. Unfortunately, the dominant Canadian society and cultural norms may create barriers for mental health seeking help for racialized students.

Suffering in silence by these racialized and immigrant students could lead to stress and depression which may lead to failure at the university and loss of productivity in their lives. Further, the state of hegemony which is prevalent in Canadian society creates an intersection of double stigma for racialized minorities. It is hypothesized that racialized and immigrant students will experience different patterns of help-seeking behaviour than the white non-racialized students and will access more informal supports.

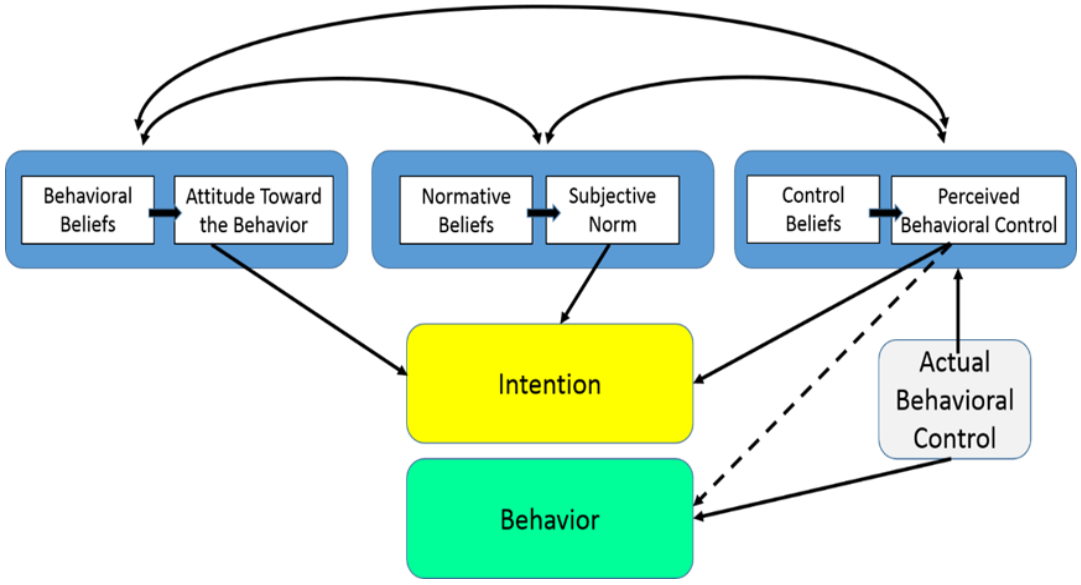
Although this review acknowledged culture as a salient variable, more importantly the intersection of social determinants of racism and unequal power relations creates barriers of health care and help-seeking behaviour for racialized groups in Canada (Bannerji, 2000). For racialized minorities there are many variables of social, cultural, power relationship and mental determinants of health: age, immigration process, gender and sex, social support, university policies, education issues, personal and cultural help seeking behaviour, new mental technologies physical environment, racialization, racism, double stigma, are not sufficiently examined in their help seeking behaviour mental health problems. As has been illustrated with the vast majority of theories and models reviewed and analysed in this study, there is a need for an engaging integrating framework to assist with understanding the complexity of help-seeking behaviour for racialized minorities and non-racialized students.

Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour (TPB) (Ajzen, 1985), is an adjunct of the Theory of Reasoned Action (Fishbein & Ajzen, 1975). TPB has been the foremost theoretical

approach to guide research on health-related behaviour for the past four decades (La Morte, 2018). The TPB has been utilized effectively to predict and explain a broad variety of health behaviours and intentions (Ajzen, 1985; La Morte, 2018). For example, these include smoking, drinking, health services utilization, breastfeeding, and substance use (La Morte, 2018). Conceptual evidence for a positive correlation between intentions to seek help and attitudes toward seeking help comes from TPB **(**as outlined in figure 1) which posits that self-reported help-seeking attitudes are closely related to help-seeking intentions and behaviours (Ajzen & Manstead 2007). As illustrated below, the TPB posits a strong link between peoples' attitudes toward a behaviour (e.g., seeking professional services) and deliberately producing that behaviour (e.g., obtaining psychological help) through a consequence of their behavioural intentions (e.g., willingness to seek psychological help**).**

Figure 1 Theory of Planned Behaviour **(**La Morte, 2018**)**



According to the TPB, the attitudes of an individual toward intended behaviour work together with (a) perceived behavioural control, or judgments about whether or not the intended behaviour should be executed (e.g., the individual's perceived stigma toward

receiving professional help); and (b) subjective norms, associated with the social pressure to perform the intended behaviour (e.g., the attitudes of society toward receiving professional help). The TPB emphasizes that understanding peoples' intentions to seek help to ameliorate their problems is just as important as understanding their attitudes toward seeking help. The TPB justifies measuring both intentions to seek help and attitudes toward seeking help in studies concerned with the use of professional psychological services *(*Ajzen & Manstead, 2007).

The assumption that attitudes predict intentions to enact a behaviour is drawn from the TBP. In this light, "attitudes" and "intentions" both need to be measured (Ajzen & Manstead, 2007*)*. The TBP and studies using this model have also shown that correlations exist among attitudes, subjective control and perceived behavioural control, while subjective norms and perceived behavioural control also predict intentions to enact a behaviour.

As cited earlier, TPB has been applied to numerous public health issues (Azjen & Manstead, 2007). More importantly, TPB has been applied in many university environments to research behaviour. A study by Bohen et al, (2016), utilizing TPB found correlation between the attitudes, social norms, perceived behavioral control (perception of barriers), and intention to understand and predict behavior of college participants. Further, Cha et al, (2008), found applying TPB was as an effective tool to decode the intentions to practice safer sex among Korean college students. Thus, empirical support for the TPB was provided by Mills (2010), who conducted a survey of 143 university students in the United States employing a questionnaire to measure beliefs about help-seeking for emotional problems. In this study, a multiple linear regression model predicted a statistically significant portion of the variance in intentions to use campus/community mental health services, with attitudes and perceived social norms as the predictor variables. The TPB supports the hypothesis that

stigma and social norms associated with seeking and using psychological services are important predictors of behavioral intentions to seek help (Bohen et al, 2016).

However, there are criticisms of the Theory of Planned Behaviour. The TPB has revealed more utility in public health than other models and theories, but it is still limited in its inability to consider environmental and economic influences (La Morte, 2018). Further, TPB does not account for other variables that factor into behavioral intention and motivation, such as fear, threat, mood, or past experiences. While the TPB does consider normative influences, it still does not take into account social and structural variables that may influence a person's intention to perform a behaviour. In addition, TPB does not concern itself with the actual control over behavior. Finally, TPB does not address the time frame between the intent and behavioural action (La Morte, 2018; Camillee et al, 2006). Researchers have recognized TPB's limitations and have utilized various elements of the TPB and supplemented additional concepts from behavioral theory to formulate a more integrated model (La Morte, 2018; Camillee et al, 2006).

Social and Cultural Determinants of Health (SCD)

The social and cultural determinants (SCD) of help-seeking theory put forward by Lee et al., (2007), and Meyers (2003), focuses on gender roles, socialization and discrimination stigma to understand help-seeking behaviour (Figure 2). The cultural determinants lens is assumed to be fruitful for understanding help-seeking behaviour in racialized groups. By integrating gender roles and socialization, with discrimination and stigma, as well as by analyzing fundamental causes, this theory seeks to enrich our understanding of help-seeking behaviour.

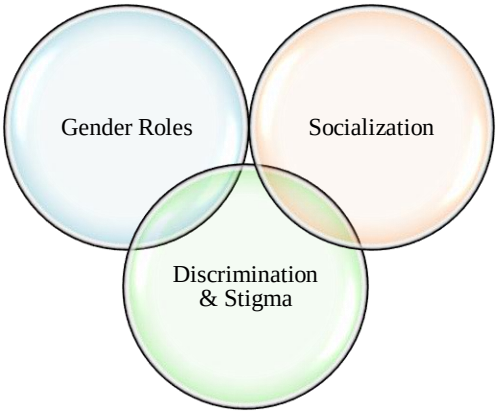


Figure 2. Social and cultural determinants of help-seeking theory

Gender roles appear to have influence by their interface with and modification of many systems: including socialization, institutional and communal resources, interpersonal and social relationships, and self-esteem and coping behaviour. Stigma and stress are mechanisms through which stigma may create adverse health outcomes, but mediational processes may operate through pathways that are unrelated to stress (Corrigan, 2004).

It is important to note that this theory has be criticized for ignoring elements of class, education, race and other structural factors in help-seeking behaviour. Further, it also has an over-reliance on the concept of culture as something static and unchanging in our contemporary society. In addition, studies concerning social and cultural determinants have been mostly descriptive, making theoretical and empirical analysis difficult.

Social Determinants of Health (SDH)

The Social Determinants of Health (SDH) is not a help-seeking model, but rather a broader framework for understanding health. It is useful for our purposes because it captures social and structural variables that impact mental health help-seeking behaviour. Raphael (2006) and Spitzer (2009), postulate the SDH framework acknowledges the socio-economic discrimination and health inequities endured by racialized groups**.** Raphael (2004), discerned

that substantial inequities in health among citizens endure notwithstanding the broad developments concerning the health of Canadians from the duration of the 19th century to present. As a population health promotion and population health care determinant the Social Determinants of Health in Canada, challenges the dominance of biomedical and behavioural risk factors in health literature. Raphael (2006), postulates that social and economic factors correlate to the health of a person, communities and political jurisdictions. The Social Determinants of Health theoretical framework emphasizes the quantity and quality of a variety of resources that a society makes available to its members such as, income, availability of food, housing, employment, health and social services (Raphael, 2006). In addition, this framework assesses economic and social policies as more appropriate means of improving healthcare (health education and help-seeking behaviour) and mitigating health inequities (Raphael, 2006).

The construct of health and mentally ill health is not merely the result of biological factors, but is also influenced by social and cultural factors. It is important to note that mentally ill health can be experienced differently in diverse contexts, and this has implications for understanding what signs and symptoms constitute mental disorders across cultures; how to identify and classify these disorders; and how best to diagnose and treat those who are affected (Varcoe, Hankivsky and Morrow, 2007).

Unlike biomedical and socio-psychological models/ theories, critical and social determinant of health frameworks insist on contextualizing health and health care seeking behaviour in a wider framework of inequality and power relationships (Carl et al, 2007). Borrowing from the intersectionality framework of Razack (1994), Jiwani, (2001), Egan and Gardner (2004), racialized groups confront (structural) barriers within the broader political, economic, historical, and social systems due to existing intersecting structural inequalities in Canadian society. Further Varcoe, Hankivsky and Morrow (2007), emphasize that the

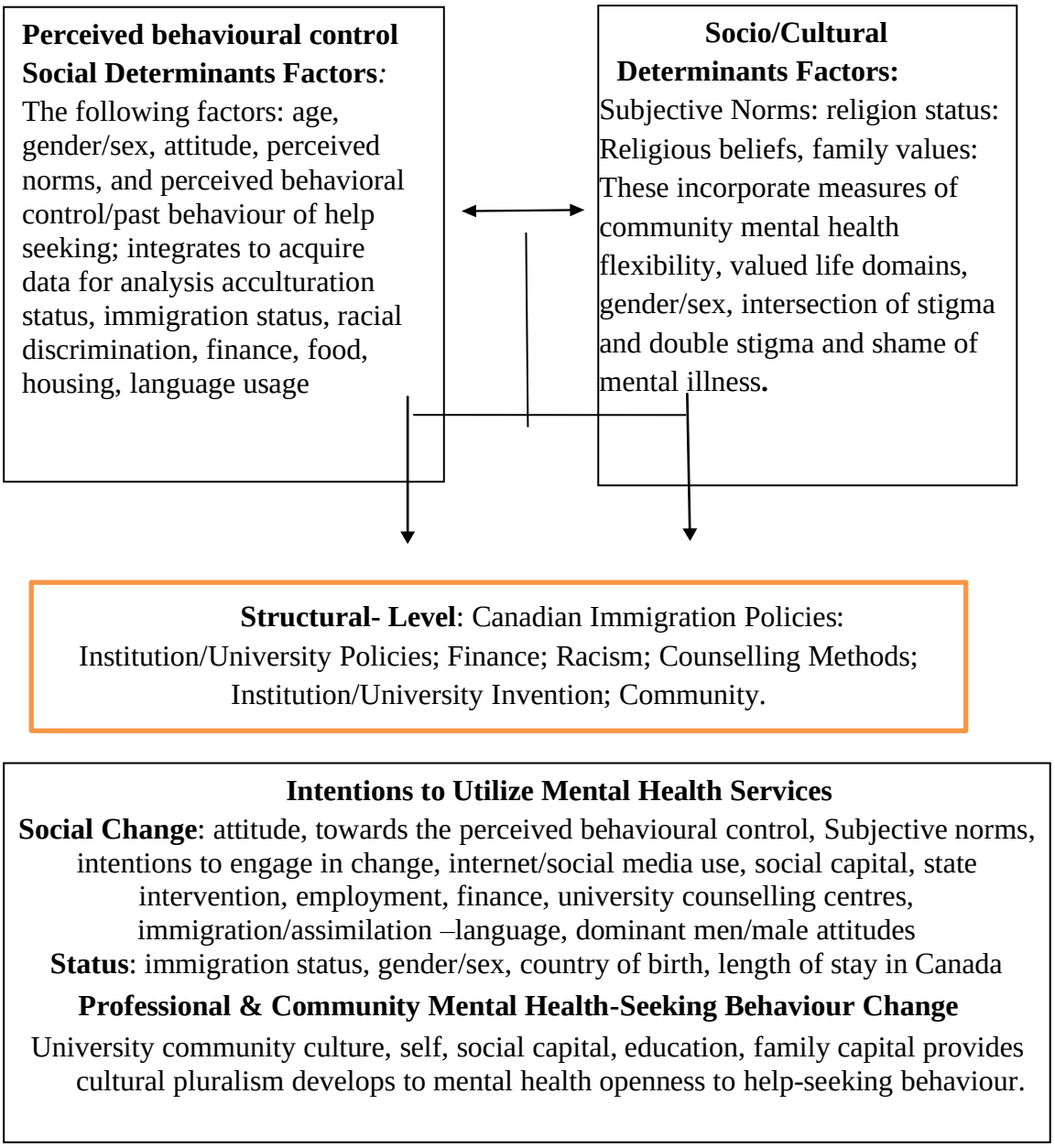
internal variations within communities based on gender, class, age, ability, and sexuality are salient determinants of healthcare and could deter racialized groups in help-seeking. These researchers' correlate healthcare behaviour of people especially racialized groups as a power relation comprised of multifaceted intersectional power relations and inequitable social relationships. The intersection of social determinants of racism and unequal power relations creates barriers to health care and help-seeking behaviour for racialized groups in Canada (Bannerji, 2000).

The Social Determinants Health Theory of Planned Behaviour (SDHTPB)

The SDHTPB theoretical framework integrates elements of Theory of Planned Behaviour with the Social and Cultural Determinants of Health Theory and the Social Determinants of Health. It is suggested that this framework can better account for both the mental health problems and social structural factors that impact mental health help-seeking behaviour for racialized and non-racialized students. For example, this integrated framework allows for an examination of the intersections between variables of stigma, mental health, racism, religion, family, gender roles and socialization, age, income, attitudes and beliefs, social support and university policies and mental health help-seeking behaviour.

The SDHTPB framework is anticipated to be a systematic and inclusive approach for helping to explain mental health help-seeking behaviour especially among racialized groups. The variables of SDH and SCD are integrated within the elements of the TPB in order to highlight systematic, social determinant and perceived behaviour control variables, all of which are important in understanding help seeking behaviour.

Figure 3 SDHTPB- framework



In the SDHTPB framework, factors of age, attitude, beliefs, perceived norms, and perceived behavioural control are integrated for comprehensive understanding. The SDHTPB framework assumes that community groups, family with higher socio-economic status, cultural norms, women, language proficiency, spiritual belief, education, and financial resources lead to pathways through which people are more likely to seek help. At a structural level, state intervention, community intervention, and/or specific organizations such as universities may contribute to mental health help-seeking behaviour.

The SDHTPB framework illustrates that the attitudes of a person towards intended behaviour can work together with the perceived behavioural control, or judgments about whether the intended behaviour should be executed or not (e.g., a person's perceived stigma toward receiving professional help). The framework emphasizes that understanding racialized groups' intentions to seek help for their problems, is just as important as understanding their attitudes toward seeking help in relationship to the structural factors that are present. It is for this reason the framework justifies measuring both intentions to seek help and attitudes toward seeking help in studies concerned with the use of professional mental health services. In turn, exploring help-seeking factors may provide guidance for developing and providing effective government inter-agency and person-centred interventions to promote mental health help-seeking behaviour for mental health issues within racialized groups including students.

Summary

To capture the complexity of help-seeking behaviour for racialized groups and students, an integrative framework was proposed here as a scaffolding tool, to integrate both mental health and structural factors. The TPB was employed especially for its proven assumptions that intentions to seek help predict help-seeking behaviour and intentions are influenced by attitudes, subjective norms and perceived behavioural control. Conceptual evidence for a strong positive correlation between intentions to seek help and attitudes toward seeking help is derived from the TPB. It posits that self-reported help-seeking attitudes are closely related to help-seeking intentions and behaviors (Ajzen, 1991). TPB postulates a strong link between peoples' attitudes toward a behavior (e.g., seeking professional mental health services) and deliberately producing that behavior (e.g., actually obtaining psychological help) through a consequence of their behavioral intentions (e.g., willingness to seek mental help).

The construct of mental health-help seeking is not merely individual choice and behaviour, but is influenced by power relations, finance, gender roles, racism, socialization age, age of immigration, mental health stigma, social, cultural and structural determinants. By integrating these elements from the three frameworks and theories of TPB, SCD and SDH, the proposed SDHTPB framework is suggested as having explanatory potential with respect to mental health help-seeking behaviour of racialized and non-racialized students. It was employed in this study as an explanatory framework for the help-seeking behaviour of racialized and non-racialized university students at York University in Canada.

CHAPTER 3: METHODOLOGY

Introduction

Cross-sectional survey methods were chosen to explore the factors associated with mental health help-seeking behaviour among racialized and non-racialized students at York University. This chapter describes and discusses the rationale, research paradigm and design, research question and hypotheses, the target population, sampling and data collection, survey instruments, variables, data analysis plan, and the ethical considerations of the study.

Purpose of the Research

The purpose of this research study was to examine the factors associated with the attitudes, intentions and behaviours of racialized and non-racialized students at York University in Ontario, Canada towards seeking help for mental health problems from a variety of sources, including professional mental health counsellors/psychologists. This was achieved by administrating a cross-sectional survey to measure, analyze, and interpret the attitudes of racialized students as well as non-racialized students enrolled at York University. This study further investigated the influence of social, cultural and structural determinants on racialized students who are attending York University. Finally, this study administrated the survey instruments, analysed and interpreted the findings related to racialized and non-racialized students with a focus on the following variables: gender/sex, structural racism, stigma, social and cultural determinants, living situation, international student status, previous mental health diagnosis and age.

Research Paradigm

This research study was informed by a critical realist paradigm. Critical realism as a meta-theory varies from both positivism and relativism frameworks. Contemporary critical realism is a school of thought in its own right, distinct from naive realism, idealistic, radical and constructivist perceptions (Bhaskar, 1978a). Critical realism may be perceived as a

specific form of scientific realism in which the objects of science are distinct from the practice of science (Bhaskar, 1989b). Bhaskar (1989b), further elaborates that critical realism is both scientific and transcendental, seeing the world as structured, differentiated, changing and holding that: "the social world if we identify the structures at work that generate those events or discourses in this environment…. This social phenomena like most natural phenomena are the product of a plurality of structures", (Bhaskar, 1989b, p. 2). In addition, positioned under the construct of post-positivism, and advancing a revised objectivist view, critical realism views:

> Any doctrine reconciling the real, independent, objective nature of the world (realism) with a due appreciation of the mind-dependence of the sensory experiences whereby we know about it. In critical, as opposed to naive, realism the mind knows the world only by means of a medium or vehicle of perception and thought; the problem is to give an account of the relationship between the medium and what it represents (Blackburn, 1996, p88).

The key elements of critical realism are guided by ontology being detached from epistemology (Baum, 2002). Critical realists are concerned with representing the ontological character of social reality (Vandenberg, 2015; Philips & Burbules, 2000). In particular, critical realists reject the idea of a single truth that can be measured. Further, within a critical realist paradigm interpretivism or statistical modeling can be used (Vandenberghe, 2015). Critical realism combines explanation and interpretation in the context of historical inquiry into cultural artifacts, social structures, persons, and what affects human action and interaction (Vandenberghe, 2015). Thus, critical realist theory links causation, utilizing partial facts, and events in the social world as a gateway of human interactions (Vandenberghe, 2015). It also recognises the complex processes and structures which trigger those facts and events (Vandenberghe, 2015).

The central mode of inference/explanation in critical realism is regarded as retroduction (Danermark et al., 2001). Retroduction as a concept allows the researcher to

realign and acquire knowledge of the attributes that are essential for a phenomenon to prevail (Danermark et al., 2001). Exclusive to critical realism, retroduction is interpreted as engaging a set of empirical observations and proposing hypothetical mechanisms (Bhasker, 2014; Danermark et al., 2001). Thus, if these empirical evidences existed, it would construct or cause those observations. Therefore, the researcher has the ability to describe the necessary conditions from the observed phenomena, (Bhasker, 2014; Danermark et al., 2001; Chiasson, 2005).

However, it must be noted that there are several critiques of critical realism. The first question is on the concept of the emphasis on ontological realism. Ray (2003), critiques that critical realism may exceed its limits at the expense of the concept-dependence of the social world. In response to this criticism, "the critical realism advocates are content to point out the difference being that intransitive entities are separated from the transitive work of science to explain them", (Sayer, 1998a, pp., 27). The quest for this explanation examines what is real at a level deeper than empiricism (Sayer, 1998a). This is due to the fact that social systems are open systems and social science explanation must account for stratified layers of reality. For an analytic method, the means to attain this knowledge is to conceptualize between empiricism and theoretical explanation to arrive at more tangible explanations (Bhasker, 1978a; Baum, 2002). This encompasses both structural and causal analysis due to the nature of open systems at the social level. Thus, in critical realism theory, causation searches for relations and not regularities (Baum, 2002).

Further, the positivist allegations that critical realism lacks criteria for testing knowledge claims about causes, are deeply informed by the positivist assumption that clear criteria for evaluation is what scientific knowledge requires. In response to this criticism, a key reason for the inadequacy of the positivist critique is that the positivists tend to evaluate critical realism on the basis of their own criteria (Sayer, 1992a). Positivists tend to utilize

their own measuring scientific methods rather than actually engaging with the core critical realist arguments (Sayer, 1992a).

Critical realists would postulate that the very request for fixed methodological criteria through which we can evaluate causal claims is unreasonable (Sayer, 1992a). Due to the fact that such criteria are not suitable in the social sciences where the nature of the ontological objects makes reliance on strict observational knowledge problematic (Sayer, 2000b). Under the critical realist paradigm, a researcher should not pretend to be entirely invisible, particularly if he/she has a social or professional involvement with the group of participants under study (Philips & Burbules, 2000). Every choice that a researcher makes has a certain amount of bias, such as selection of a topic and populations of interest, and these should be accounted for throughout the conduction of research (Philips & Burbules, 2000).

Research Question and Hypotheses

This study was designed to address the research question: What are the factors associated with the attitudes and beliefs of racialized and non-racialized students at York University in Ontario, Canada, towards seeking professional help from mental health counsellors/psychologists and other professionals to alleviate their mental health problems? The focus here was racialized students and the intersection of gender/sex, stigma, racism, religion, social and cultural determinants, income, living situation, international student status and previous mental health diagnosis. These intersections are examined for how they influence students' beliefs and attitudes towards mental health help-seeking behaviour. The demographic hypotheses discussed below are largely exploratory with the intention that they will assist in explaining help-seeking behaviour for mental health at York University.

The following research hypotheses (i.e., the propositions that the researcher believed to be true) were tested, based on information extracted from the recent literature.

As recommended by Bowker & Randerson (2007), the research hypotheses were classified as univariate (i.e., proposing that one independent variable has an effect on one dependent variable); bivariate (i.e., proposing that an association exists between two variables, not designated as either dependent or independent); or multivariate (i.e., proposing that multiple independent variables have effects on one or more dependent variables).

The research hypotheses were guided in this study as follows:

Hypothesis 1

1. (a): Racialized and non-racialized Men gender (GEN); will be predictor of a lower level of attitudes towards help seeking;

1. (b): Younger respondents in the age group 18-25 years (AGE) will predict a lower level of attitudes towards help seeking (ASHP);

1. (c): Previous diagnosis (PRD) will be a predictor of a higher level of attitudes towards help-seeking (ASHP).

Hypotheses 1(a); 1(b); and 1(c) were defined as multivariate because they proposed that an exact linear combination of multiple variables (known as a "variate") predicted one dependent variable (Hair, Anderson, Babin, & Black, 2010). It was not possible to accurately predict the directions of the relationships defined by this multivariate hypothesis because a linear combination of gender/sex, ethnic identity, racial group, age, was incorporated as a variate within a single regression equation:

$$ASHP = \beta_0 + \beta_1\ GEN + \beta_2 + REG + \beta_2\ ETI - \beta_3\ AGE + \beta_4\ PRD$$

Where ASHP = dependent variable; GEN, ETI, REG, AGE and PRD = independent variables; β_0 = constant; β_1, β_2, β_3, and β_4 = standardized partial regression coefficient (or β weights, ranging from = -1 to +1). The sign (i.e., positive or negative) and/or the magnitude of each partial regression coefficient took into account the effects of every other independent

variable in the equation. Consequently, unpredictable results were possible, that did not reflect the results of a simple univariate or bivariate analysis (Hair et al., 2010).

The rationale to support Hypothesis 1 was that the expected findings based on the literature were as follows. With respect to gender: men in general tend to have more negative attitudes toward mental healthcare utilization, whereas women tend to have more positive attitudes (Mahalik & Rochlen, 2006; Wang et al., 2007). Beck et al., (2009), suggested that, in Canada, men and international students experience the most negative attitudes and emotional barriers toward accessing mental health services. Furthermore, racialized groups may exhibit more negative attitudes towards seeking psychological help services than non-racialized groups (Paniagua & Yamada, 2013; Wang et al., 2007; Rao et al., 2007). With respect to age: students between the ages of 18-25 may represent the highest risk of mental health issues associated with rates of low help-seeking (Rickwood et al., 2007; Zachrisson et al., 2006). With respect to previous diagnosis: past experience of seeking help for mental illness may increase the likelihood of students seeking help in the future (Jorm et al., 2000; Surgenor,1985). Fischer and Shaw (1999), and Hartong (2011), found that both prior experience of counselling and women were predictive factors of positive attitudes towards seeking help. Past experiences of help-seeking may enlighten the clients' beliefs in treatment and result in an increased likelihood of seeking treatment again (Prakask, et al, 2013; Carpenter-Song et al, 2010; Farrell et al, 2008).

Hypothesis 2

Hypothesis 2: For racialized men students, gender (GEN), identification with the heritage culture, associated with ethnic identity (ETI), and race-related stress (RRST), will be predictors of:

2. (a): Increased levels of depression (DEPR) and anxiety (ANXY);

2. (b): Increased levels of stigmatization (STIG);

2. (c): More negative attitudes toward help-seeking (ASHP);

2. (d): A lower level of intentions to seeking help (ITSH).

Hypotheses 2(a); 2(b); 2(c); and 2(d) are multivariate, because they each proposed relationships between more than three variables (Hair et al, 2010). To test these hypotheses, gender/sex, ethnic identity, and race-related stress were linearly combined as a single variate within the following five multiple regression equations:

$$DEPR = \beta_0 + \beta_1 GEN + \beta_3 ETI + \beta_3 RRST$$

$$ANXY = \beta_0 + \beta_1 GEN + \beta_2 ETI + \beta_3 RRST$$

$$STIG + \beta_0 + \beta_1 GEN + \beta_2 ETI + \beta_3 RRST$$

$$ASHP = \beta_0 + \beta_1 GEN + \beta_2 ETI + \beta_3 RRST$$

$$ITSH = \beta_0 + \beta_1 GEN + \beta_2 ETI + \beta_3 RRST$$

Where DEPR, ANXY, STIG, ASHP, and ITSH = dependent variables; GEN, ETI, and RRST= independent variables; β_0 = constant; β_1, β_2, and β_3 = standardized partial regression coefficients. Accurate prediction of the direction of the hypotheses was not possible due to the reasons given for Hypothesis 1.

Hypothesis 3

For non-racialized men students, identification with the mainstream culture associated with ethnic identity, and race-related stress will not be predictors of:

3. (a): Increased levels of depression and anxiety (DEPR and ANXY);

3. (b): Increased levels of stigmatization (STIG);

3. (c): More negative attitudes toward help seeking (ASHP);

3. (d): A lower level of intentions to seeking help (ITSH).

The five equations for these multivariate hypotheses are the same as defined for Hypothesis 2, (using ≠ rather than =) as follows:

$$DEPR \neq \beta_0 + \beta_1 GEN + \beta_2 ETI + \beta_3 RRST$$

$$ANXY \neq \beta_0 + \beta_1 GEN + \beta_2 ETI + \beta_3 RRST$$

$$STIG \neq \beta_0 + \beta_1 GEN + \beta_2 ETI + \beta_3 RRST$$

$$ASHP \neq \beta_0 + \beta_1 GEN + \beta_2 ETI + \beta_3 RRST$$

$$ITSH \neq \beta_0 + \beta_1 GEN + \beta_3 ETI + \beta_3 RRST$$

The rationale to support Hypothesis 2 and 3 was the expected findings based on the literature and were as follows. With respect to gender: racialized men tend to have a lower rate of mental health care utilization than racialized women (Wang et al., 2007). Racialized men may demonstrate the confirmation of their perceived dominant intersections of masculine roles by not seeking help (Leong et al., 2011). With respect to identification with heritage or mainstream culture and ethnic identity: research on racialized groups has indicated similar cultural heritage trends associated with negative attitudes towards seeking psychological help services (Paniagua & Yamada, 2013; Wang et al., 2007; Rao et al., 2007; Twentyman, Frank, & Lindsey, 2017). With respect to depression and anxiety: these affective disorders are more prevalent among college and university students in the United States than in the general population (Beiter, Nash, McCrady, Rhoades, Linscomb, Clarahan, & Sammut, 2015; Soet & Sevig, 2006). A study of Canadian students (Villatte et al.,2011) determined that it is the combination and accumulation of a significant number of factors (personal, family-related, social, class, family income and academic) that affect depressive symptoms in young students. Further, sociodemographic, family-related, academic, social, and personal variables were among those associated with depressive symptoms in this population of emerging young students (Villatte et al., 2017).

Racialized students tend to be more prone to depression, stress and anxiety associated with migration stressor than non-racialized students (Holliday, Anderson, Williams, Bird, Matlock, Ali, & Suris, 2016). Racialized groups in Canada and the United States who suffer from depression, stress and anxiety tend in general to be more reluctant to use mental health

services than non-racialized groups (Komiya et al., 2000; Ting & Hwang, 2009; Paniagua & Yamada, 2013; Wang et al., 2007). With respect to stigma many people with mental health problems experience stigmatization associated with the discrimination that they feel because other people perceive mental illness to be a negative attribute. Some people suffering from mental illness experience the intersection of multiple stigma, because as well as struggling with the symptoms and disabilities of their illness, they are also challenged by the prejudice that results from misconceptions about mental illness (Corrigan & Watson, 2002). Surveys have revealed that individuals with significantly high levels of stigmatization are less likely to seek professional services than those with lower levels of stigmatization (Vogel et al., 2006). Stigma is reputed to be an important predisposing characteristic acting as a barrier to the use of health services by racialized students in the United States, (Rao & Corrigan, 2007; Ting & Hwang, 2010). Stigma may result in negative long-term health outcomes for students who are members of racialized groups (Corrigan, 2004; Gary, 2005). Although both men and women experience stigma, more men in comparison to women tend to experience greater levels of stigma associated with mental health issues (De Bate, Gatto, & Rafal, 2018; Wirth & Bodenhausen, 2009).

Hypothesis 4

Students living in on-campus housing (LVS) will have higher levels of help-seeking attitudes (ASHP) and lower levels of stigma (STIG) compared to students living off campus. These are univariate hypotheses predicting the effect of one independent variable (LVS) on two dependent variables (ASHP and STIG).

The rationale to support Hypothesis 4 based on the literature was that residing on university campus may lay the foundation for a higher level of help-seeking behaviour, particularly when campus-based initiatives addressing mental health have been initiated, with the goal of promoting the well-being of students (Beks, Cairns, Smygwaty, et al., 2018).

Hypothesis 5

The York University Counselling Centre (UCS) will be utilized more by non-racialized students than racialized students (REG). This is a bivariate hypothesis proposing an association between two categorical variables (UCS and REG).

The rationale to support Hypothesis 5 based on the literature was that Loya et al. (2010) found that non-racialized students exhibited more positive attitudes towards university counselling services than racialized students.

Hypothesis 6

Informal help seeking behaviour (INHS) will be more prevalent among racialized students compared to non-racialized students (REG). This is a univariate hypothesis predicting the effect of one independent variable (REG) on one dependent variable (IHST). The rationale to support Hypothesis 6 based on the literature was that informal social support from families may be more important than professional help to maintain psychological well-being among racialized students. Surveys have shown that only after racialized students have sought informal help from their families, do they seek formal treatment (Chan, et al., 2010; Herdon & Hurt, 2004).

Hypothesis 7

The international students (INS) will have poorer help-seeking behaviour (INHS) and higher stigma (STIG) than citizens/permanent residents. This is a univariate hypothesis predicting the effect of one independent variable (INS) on two dependent variables (IHST and STIG). The rationale to support Hypothesis 7 based on the literature was that Beks et al. (2009) suggested that international students in Canada experience more emotional barriers to accessing mental health services than other students.

Hypothesis 8

Information on E-Mental health technology (UOI) will be utilized by both racialized students and non-racialized students (REG). This is a bivariate hypothesis predicting an association between two categorical variables (UOI and REG). The rationale to support Hypothesis 8 as the expected finding is that young people of all racial backgrounds have been shown to accept electronic mental health information as sources of health information (Burns et al., 2010; Christensen & Hickie, 2010a, 2010b).

Hypothesis 9

Attitudes Toward Seeking Help (ATSH), Intention to Seek Help (ITSH); and Informal Help-Seeking Behavior (INHS) will be positively correlated with each other, but negatively correlated with behavioral control, based on subjective judgments (e.g. stigmatization). Hypothesis 9 is underpinned by the Theory of Planned Behaviour (Ajzen & Manstead, 2007) positing a strong link between peoples' (in this case racialized and non-racialized students) social/cultural/religious attitudes, intentions, behavioral control, and behaviour (see Figure 9).

Target Population

The target population for this study was specifically racialized students enrolled at York University/Keele Campus, a public university located in Ontario, Canada. York University is the third largest university in Canada. As we have noted earlier, Toronto is the most diverse city in Canada. The current student population is approximately 53,000 students (Yorku Website, 2017), comprised of mostly racialized students. The term international students commonly refer to students who study abroad in a host country for a short period of time; they comprise a population of 22% at York University (Yorku Website, 2017). A convenience sample was drawn from the target population. The inclusion criteria were: being an actively enrolled student at York University who commenced his/her current study at the age of 18 years. While the focus in this study was on racialized students, all students were

invited to participate to compare and contrast for deeper understanding. Participations were not restricted by any other demographic variable, such as age, gender-sex, marital status, socio-economic status, education level, ethnic background, disability or history of mental illness.

Sampling Procedure

An a priori power analysis using G*Power software (Faul, Erdfelder, Lang, & Buchner, 2007) assuming a small effect size ($f^2 = 0.05$) a conventional level of statistical significance ($\alpha = .05$); and an acceptable level of power ($1 - \beta = 80\%$) with maximum of seven independent variables, predicted that the minimum total sample size should be about $N = 295$ in order to conduct multiple linear regression analysis. The achieved sample size ($N = 491$) was greater than 295, therefore the sample was not underpowered (Faul, Erdfelder, Lang, & Buchner, 2007).

Archer (2008) indicated that response rates between 40% and 62% can be expected using online surveys. Therefore, to improve the response rate, multiple strategies were applied to recruit students. First, study flyers (Appendix A) with a link to online survey were placed at on the university bulletin boards. Second, course directors in the School of Health Policy and Management were invited to circulate the study flyer to their classes using Moodle. This strategy was used after seeking permission of the School Chair and course directors. The course directors' permission was obtained to visit some of the classes to invite students to participate in the study and share the online link for the survey.

Interested participants who clicked the link were led externally to Survey Monkey, an electronic survey website, to complete their responses to the instruments in a confidential and anonymous manner. Prior to completion of the survey, the participants were provided with details about the purpose of the study, the voluntary nature of their participation, their rights to withdraw anytime without consequences, risks and benefits, and their confidentiality and

privacy along with contact information for the researcher and ethics review committee at York University. They were told that their informed consent was implied by completing the survey. The rights of the participants are protected, as described under Ethical Considerations.

Survey Instruments

The cross-sectional survey involved the administration of the eight instruments listed in Table 1. The total number of items was 148 which could be completed in less than one hour.

Socio-Demographic Questionnaire

The Socio-Demographic Questionnaire (see Appendix B) elicited information about the socio-demographic characteristics of the students, including gender-sex, age, relationship status, citizenship, racial/ethnic identity, student status at York University, living situation, use of counselling services at York University, use of online mental health/app information system at York University, and previous diagnosis.

Table 1

List of Survey Instruments

Variables	Instrument	Items
Socio-demographic Factors	Questionnaire designed by the researcher.	25
Attitudes	Attitudes Toward Seeking Professional Help Scale (Fischer & Farina, 1995).	10
Intention Stigma Expertness of Professionals	Beliefs About Psychological Services Scale (Aegisdottir, & Gerstein, 2009).	18
Identification with Mainstream Culture Identification with Heritage Culture	Vancouver Index of Acculturation (Ryder, Alden & Paulhus, 2000).	20
Race-related Stress	Race-Related Events Scale (Waelde, Pennington, Mahan, Kabour, and Marquett, 2010).	22
Depression Symptoms	Centre for Epidemiological Studies Depression Scale (Radloff, 1977).	20

Personal Help-Seeking Behaviour	General Help-Seeking Questionnaire (Wilson, Deane, Ciarrochi & Rickwood, 2005).	12
Anxiety	Beck Anxiety Inventory (Beck, Epstein, Brown, & Steer,1988)	21

Beliefs about Psychological Services Scale (BAPS)

The BAPS (Aegisdottir & Gerstein, 2009) instrument consists of 18 items, each with a 6-point response format, ranging from 1, Strongly Disagree, to 6, Strongly Agree (see Appendix D). The 18 items encompass three subscales which correspond to three of the variables of interest to the current study: Intention (6 items), Stigma (8 items) and Expertness (4 items). The three sub-scales are operationalized by averaging (i.e., by adding the item scores for each subscale, and then dividing by the number of items). Higher scores correspond to a greater intention to seek professional services, to lower levels of stigma, and to more positive beliefs in the expertness of professionals. Based on surveys conducted in USA and Europe (Aegisdottir & Gerstein, 2009; 2012; Aegisdottir, O'Heron, Hartong, Haynes, & Linville, 2011) this instrument has well-established psychometric properties, including factorial validity, construct validity, convergent validity, divergent validity, test-retest reliability (r = .75 to .88), and internal consistency reliability (Cronbach's alpha = .70 to .86).

The main reason for using BAPS (Aegisdottir & Gerstein, 2009) was that only 18 items were required to operationalize three variables (Intention, Stigma, and Expertness), thereby helping to reduce questionnaire fatigue. The alternative approach would be to administer several instruments to measure the same variables (e.g., the General Help-Seeking Questionnaire, Wilson, Deane, Ciarrochi & Rickwood, 2005) with 12 items to measure Intention; the Intentions to Seek Counseling Inventory (Cash, Begley, McCown, & Weise, 1975), with 17 items to measure Intention; the Self-Stigma of Seeking Help (Vogel, Wade,

& Haake, 2006) with 10 items to measure Stigma ; and the Discrimination-Devaluation Scale (Eisenberg, Downs, Golberstein, & Zivin, 2009) with 12 items to measure Stigma and the Beck Anxiety Inventory Symptoms of Anxiety.

Attitudes Toward Seeking Professional Help Scale (ATSPHS)

The ATSHPS (Fischer & Farina, 1995) consists of 10 items, each rated with a 4-point response format from 0, *Disagree;* to 3, *Agree* (see Appendix C). A sample item from the scale is, "If I believed I was having a mental breakdown, my first inclination would be get professional attention." Five of the items are reverse scored and the scores are summed to operationalize the scale. The total score ranges from 0 to 30, with higher scores indicating more positive attitudes towards seeking professional help. The developers reported that internal consistency was good (Cronbach's alpha = .84) and test-retest reliability was also high (r = .80).

Vancouver Index of Acculturation (VIA)

The VIA (Ryder et al., 2000) is a well-established 20-item measure assessing acculturation using a bilinear framework (see Appendix E). The scale yields two scores that relate directly to mainstream and heritage culture, respectively. Participants respond to each of the items using a format ranging from 1 (low identification) to 9 (high identification). Total subscale scores range from 10 to 90, with higher scores indicating a stronger identification with the cultural relationship being measured by that particular subscale. Examples of items include "It is important for me to maintain or develop the practices of my heritage culture" and "I am interested in having North American friends." A higher score on either of the subscales would indicate greater identification with the respective culture. Internal consistency measured by Cronbach's alpha was estimated by Ryder et al to be at .83 for the mainstream cultural subscale and .90 for the heritage cultural subscale Concurrent validity was indicated by both subscales being significantly correlated with length of time lived

in a Western country, length of time educated in s that country, generational status, sojourner status, and English as first or second language.

Race-Related Events Scale (RES)

The Race-Related Events Scale (RES) is a simple 22-item checklist designed as a brief and easy-to-use screening measure for potentially traumatizing race-related experiences (see Appendix F). Participants endorse a particular listed experience if it was perceived to be related to his/her racial or ancestral heritage. The total score is estimated by summing the 22 items; hence it ranges from 0 to 22, with higher scores indicating more stress related to race or cultural heritage. The psychometric properties of the RES were evaluated in an ethnically diverse sample of undergraduate students in the USA, indicating good internal consistency (Cronbach's alpha = .86) and adequate test–retest reliability ($r_{.}$ = .66). The validity of the RES was supported by findings that White Americans reported less race-related stress than other ethnic groups and African Americans reported more than Asian Americans.

Centre for Epidemiological Studies Depression Scale (CES-D)

The CES-D (Radloff, 1977) is a 20-item scale widely used to assess depressive symptoms in the general population (see Appendix G). The instrument presents a list of ways that the respondent may have felt or behaved during the previous week, with a 4-point response format ranging from 0, Rarely, or none of the time (less than 1 day) to 3, Most or all of the time (5-7 days). Examples from the 16 items describing depressive systems are "I felt that I could not shake off the blues, even with help from my family and friends" and "I felt that everything I did was an effort." The scores are reversed for four items that do not describe depressive symptoms (e.g., "I felt hopeful about the future" and "I enjoyed life"). The scale is operationalized by summing the scores. The possible range is 0 to 60. A score of 16 or more indicates that the respondent is depressed. The reliability of the CES-D was reported to be good (Cronbach's alpha > .85) by Hann, Winter, and Jacobsen, (1999).

It is important to note that the factor structure of the BDI-11 researched was comprised mostly of non-racialized adult participants. Further, Hamm, (2014); Quillian, (2012), cite that the BDI-11 has not been ratified within minorities in the United States and world-wide. However, several studies including: Sashidharan, Pawlow & Pettibone, (2012), Shafer, (2005), Beck, Steer & Brown, (1996), Gary & Yarandi, (2004), conveyed reliable association and differentiate validity when correlations were formulated with additional standard measures for all racial groups

Further in a study conducted (Beck et al, 1996), in Canada, all the university students were enrolled in a first-year university course at a university in Fredericton. In this study the participants were predominantly non-racialized with a very small sample of racialized students. In a classroom setting, the subjects (67, 57% women; 53, 44% men), reported a mean age of 19.58 years, with a coefficient alpha of .93., Beck et al, (1996), conveyed reliable association and differentiate validity when correlations were formulated with additional standard measures. The factor structure of the BDI-II exposed two mechanisms, "cognitive symptoms" and "somatic-affective symptoms."

General Help Seeking Questionnaire (GHSQ)

The General Help-Seeking Questionnaire (Deane, Wilson, & Ciarrochi, 2001), was used to identify those people who the respondents might seek help or advice from if they were experiencing a personal or emotional problem (see Appendix H).

Beck Anxiety Inventory (BAI-II)

The Beck Anxiety Inventory, second edition (BAI-II; Beck, Epstein, Brown, & Steer, 1988), is a 21-item patient-reported measure utilized to appraise the inclusive subjective anxiety (see Appendix I). Individually each item is rated on a 0-3 scale and quantity from a range of 0-63. Subjects rate the severity of each symptom over a one-week period. A score above 10 is characteristically measured to signify clinically significant

levels of anxiety. The BAI-II is internally consistent (Cronbach's alpha = .94), with acceptable test-retest reliability (r = .75 after 1 week and r = .67 after 2 weeks).

The Beck Anxiety Inventory (BAI-II), is the foremost assessment and aftermath research tool for determining the anxiety of the general and sub-population of a society (Bardhoshi, Duncan, & Erford, 2016). The instrument has been validated for a number of languages and cultures, including German, French, Chinese, Spanish, Persian, Nepal, Icelandic, and Korean, (Kohrt, Kunz, & Koirala, 2007; Kaviani & Mousavi 2008; Han, Cho, Park, & Kim, 2003; Oh, Park, Yoon, & Kim, 2018).

Al-Issa, Bakal and Fung (1999), conducted a survey using 202 racialized Lebanese students at the American University of Beirut, Lebanon and 557 non-racialized "White" Canadian students at the University of Calgary Canada, confirming the validity and of the BAI-11 for use with various racialized groups. In this study students were separated into male and female subgroups and comparisons were constructed on the foundation of aggregate symptom scored as well as subscale scores mirroring neurophysiological, subjective, panic, and autonomic symptoms. On all assessments, racialized Lebanese students attained notably greater anxiety scores than the non-racialized Canadian students. Therefore, it was assumed that the BAI-11 is a prominent anxiety assessment tool and was utilized for racialized groups in this study.

Data Collection Procedure

A convenience sample was drawn from the target population. The inclusion criteria were all students, commencing at the age of 18 years old, enrolled at York University, who volunteered to participate. Participations were not restricted by any demographic variable, such as racial or ethnic background, age, marital status, socioeconomic status, education level, disability or history of mental illness. The researcher invited all students who are enrolled at York University to participate in an online survey. Class participation was also

utilized to reach all participants in various faculties and departments at the York Keele campus. In order to increase the response rate, the researcher attended several classes where, with the collaboration of the professor, the students completed the surveys in class. Interested participants who clicked the link were led externally to Survey Monkey, an electronic survey website, to complete their responses to the instruments. By completing the survey, the informed consent of the participants was ensured. The rights of the participants were protected, as described below under Ethical Considerations.

Data Analysis Plan

The data analysis was conducted using SPSS vs. 24.0 using methods described by Field (2013). Tables 2 and 3 list the definitions of the variables used to test the stated hypotheses. Table 2 lists the continuous (interval level variables) measured with Likert-Scales coded in SPSS using a variable name with four letters. The categorical variables in Table 3 were coded as an SPSS variable name with three letters.

The socio-demographic and contextual characteristics of the respondents were summarized by frequency distributions (counts and percentages of each category). The ten continuous (interval level) variables were summarized using descriptive statistics (minimum, maximum, mean, median, and standard deviation). The mean scores ± 95% confidence intervals (CI) of the ten variables were computed to compare the mean scores between different groups of students. A statistically significant difference ($p < .05$) between two mean scores was inferred if their 95% CI did not overlap with each other (Fidler & Loftus, 2009; Knezevic, 2008).

Table 2

Definitions of Continuous (Interval Level) Variables used for Testing Hypotheses

Variable name		Conceptual Definition	Operational Definition
Help-Seeking Attitudes	ASHP	Attitudes that a person hold toward seeking help from a psychologist or other mental health professional	Interval level scale measured with ATSPHS; Fischer & Farina (1995). Range = Higher scores indicated more positive attitudes toward seeking help.
Informal Help Seeking	INHS	People who the respondents seek help or advice from.	Interval level scale measured with GHSQ (Deane, et al., 2005). A higher total score indicated more informal help-seeking behaviour
Help-Seeking Intentions	ITSH	Intention that a person has to seek help for personal-emotional problems	Interval level scale measured with Intention subscale of BAPS; Aegisdottir & Gerstein (2009). Higher average scores indicated more positive attitudes toward seeking help.
Stigma	STIG	What a person believes that other people might think about seeking professional help	Interval level scale measured with the Stigma subscale of BAPS; Aegisdottir & Gerstein (2009). Higher average scores indicated higher stigma associated with seeking help.
Expertness of Professionals	EXPT	The beliefs that a person holds towards the benefits that they will gain by seeking help from professionals	Interval level scale measured with BAPS; Aegisdottir & Gerstein (2009). Higher average scores indicated greater belief that seeking expert help will provide personal benefits.
Identify with heritage culture	IDHC	The perceptions that a person has toward the heritage culture when living outside the heritage country.	Interval level scale measured with Heritage Culture subscale of VIA; Ryder et al (2000). A higher total score indicated a stronger identification with the heritage culture.
Identify with mainstream culture	IDMC	The perceptions that a person has toward the mainstream culture when living outside the heritage country	Interval level scale measured with Mainstream Culture subscale of VIA; Ryder et al (2000). A higher total score indicated a stronger identification with the mainstream culture.
Race Related Stress	RRST	Number of stressful experiences associated with race or cultural heritage.	Interval level scale measured with RES; Waelde et al. (2010). A higher total score indicated more race related stress.
Anxiety Symptoms	ANXY	A mental illness symptomized by feelings of anxiety and stress	Interval level scale measure with BAS; Beck, et al. (1988). A total score > 10 indicated that the respondent suffered from anxiety.
Depression Symptoms	DEPR	A mental illness symptomized by feelings of sadness, despondency, dejection, and hopelessness.	Interval level scale measured with CES-D; Radloff (1977). A total score > 16 indicated that the respondent was depressed

Table 3

Definitions of Categorical Variables Used for Testing Hypotheses

Variable	SPSS Variable Name	Conceptual Definition	Operational Definition
Gender/Sex*	GEN	Response to: Gender	1 = Men, 0 = Women
Ethnic Identity *	ETI	Response to: Do you usually think of yourself more as a...	1 = Canadian 0 = Other (e.g., Asian Canadian Caribbean Canadian, African Canadian, or European Canadian
Ethnic/Racial Group *	REG	Response to: My ethnicity/racial background is:	0 = Non-Racialized 1 = Racialized
Age	AGE	Response to: Age___ Years	0 = 18-25; 1 = 26-65
Previous Diagnosis*	PRD	Response to items concerning the previous diagnosis of mental illnesses	0 = No; 1 = Yes
York University International Student*	INS[a]	Response to York Universit Student Status	0 = Undergraduate, Masters, PhD; Other; 1 = International
Living Situation	LVS	Response to: Where do you currently live?	1 = I live on campus; 2 = I live with my family; 3 = I live off campus
Use of Counselling Services*	UCS[a]	Response to: Have you ever use the Counselling Service York University	0 = No; 1 = Yes
Use of Online Mental Health/APP Information System*	UOI[a]	Response to: Have you used th online Mental Health/APl Information System	0 = No; 1 = Yes

Note [a] These variables were coded in binary format (1= Yes or 0 = No for each category) to comply with the rules for the coding of nominal variables in multiple regression (Chattergee, Hadi, & Price, 2007).

Table 4 lists the methods of inferential statistical analysis used to test the hypotheses. The methods were chosen that were most appropriate for the measurement levels of the dependent and independent variables (Field, 2013).

Table 4

Testing of Hypotheses

Hypothesis	Method
1	Multiple regression
2	Multiple Regression
3	Multiple Regression
4	ANOVA
5	Chi-Square Test
6	ANOVA
7.	ANOVA
8	Chi-Square Test
9	Pearson's Correlation Coefficients

Multiple regression was used to test Hypotheses 1, 2 and 3 because the dependent variables were measured at the continuous (interval) level and one or more independent variables were measured at the continuous (interval) level or were classified as binary dummy variables (categories coded by 0 and 1).

Factorial Analysis of Variance (ANOVA), was used to test Hypothesis 4, 6, and 7 because the dependent variables were measured at the continuous (interval) level and the independent variables were classified into two or more nominal categories. Chi-Square tests

were used to test Hypotheses 5 and 8 because both the dependent and independent variables were classified into nominal categories. Pearsons's correlation analysis was used to test Hypothesis 9 because all the variables were measured at the continuous (interval) level

Statistical significance was indicated if $p < .05$ for the inferential test statistics. However, the *p*-value did not reflect the importance of the results. According to the statement issued by the American Statistical Association, the *p*-value does not distinguish between important and unimportant results, does not indicate the size of an effect, and should not be the only statistic that is used to make scientific conclusions or to support policy decisions (Wasserstein & Lazar, 2016).

The practical significance of the results of Multiple Regression and ANOVA were indicated by the effect size, R^2 (i.e., the proportion of the variance in the dependent variable explained by the independent variable). The effect size for Chi-Square tests was indicated by Cramer's *V* coefficient. The interpretation of the effect size was .04 = minimum effect size to indicate a practically significant effect; .25 = moderate practical significance; .64 = strong practical significance (Ferguson, 2009). Practical significance implied that the results were meaningful in the context of the study, and that the results could be interpreted to make scientific conclusions and support policy decisions in educational institutions (Kirk, 1996). The theoretical assumptions of correlation and regression analysis (Chatterjee, Hadi, & Price, 2007; Hisham, 2008), ANOVA (Rutherford, 2001) and Chi-Square tests (Hugh, 2013) were tested and found not to be violated.

Ethical Considerations

Because the study involved human participation, ethical considerations must be observed. The researcher pursued the approval for the study procedures, including the administration of the instruments, from the Research Ethics Committee of York University. Informed consent was required from each participant through on-line consent. The names of participants were kept confidential and no information was recorded that enabled any participant to be personally identified. Participants were informed of their rights and reminded of their option to withdraw at any point during the study (see Appendix A). No justifiable deceptions were required and no unethical research techniques were used. This study did not engage in fraud, subterfuge, or intentional misrepresentation of fact. Although the risk to the participants' health and well-being was considered to be minimal, the consent form provided information that in the event of negative recall of mental health issue, there was mental health professionals available in the Counselling Centre at York University.

Summary

Many self-report instruments have been developed to measure the attitudes that people with personal-emotional problems have towards seeking professional help. The instruments used in this study, in chronological order are: the Descriptive Socio Demographics of the Student population; the Attitudes Toward Seeking Professional Help Scale (Surgenor, 1995); Beliefs About Psychological Services Scale (Aegisdottir, & Gerstein, 2009); Vancouver Acculturation Index (Ryder, et al, 2000); Race Related Events Scale (Waelde, et al, 2010); Centre for Epidemiological Studies Depression Scale (Radloff, 1977); the General Help-

Seeking Questionnaire (Wilson, Deane, Ciarrochi & Rickwood, 2005); and finally, the Beck Anxiety Inventory, second edition (BAI-II; Beck, Epstein, Brown, & Steer, 1988) were utilized.

This research focused on the use of several instruments and descriptive data in a cross-sectional survey to measure, explore, and predict the attitudes toward the use of professional mental help for depression among the population of York University but more saliently the target population of racialized students' in Ontario, Canada. By integrating multiple disciplinary frameworks of Social Determinates of Health, Social and Cultural Theory and the Theory of Planned Behaviour, this research has attempted to investigate the **c**omplex personal, social-structural and structural determinants which may influence racialized ethnic student's decision not to seek help when faced with personal emotional problems like depression. These factors encompass numerous variables: age, age of immigration and education, personal, gender-sex positionality, racism, region, social/cultural, structural barriers, stigma and shame. As well as variations in acculturation processes related to the mental health and behavioural stresses associated with the transition through a university and cross-cultural variables. This may explain the differences between racialized and non-racialized cultures regarding stigma and negative attitudes associated with seeking and using professional mental health services. Ultimately, the findings of this research study may create an open environment to redirect university policy governances and foster greater awareness of the attitudes of all students among the professionals involved in providing mental health services at a York University, other Canadian universities and elsewhere.

CHAPTER 4: RESULTS

Introduction

The results obtained using the methods discussed in Chapter 4 are presented in thirteen sections as follows: (1) Screening and Cleaning of Survey Data; (2) Socio-demographic and Contextual Characteristics of Respondents; (3) Descriptive Statistics; (4) Hypothesis 1; (5) Hypothesis 2; (6) Hypothesis 3; (7) Hypothesis 4; (8) Hypothesis 5; (9) Hypothesis 6; (10) Hypothesis 7; (11) Hypothesis 8; (12) Hypothesis 9; (13) Summary.

Screening and Cleaning of Survey Data

A total of $N = 570$ students responded to the survey, of which $n = 491$, 86.1% completed the items in the Attitudes Toward Seeking Professional Help Scale; Beliefs About Psychological Services Scale; Vancouver Index of Acculturation; Race-Related Events Scale; Centre for Epidemiological Studies Depression Scale, and Beck Anxiety Inventory, as well as reporting their racialized status and ethnic identity. The students who did not complete the instruments, and/or who did not report their racialized status *(*$n = 79$, 13.9%) were excluded.

Socio-demographic Characteristics of Respondents

Table 5 summarizes the socio-demographic characteristics of 491 respondents (counts and percentages in each category) classified by racial/ethnic group ($n = 78$, 15.9% Non-Racialized; $n = 413$, 84.1% Racialized). The missing responses are excluded, therefore the percentages of the categories within each group do not necessarily add up to 100%. It is

salient to note that the vast majority of the student population are racialized students at York University, whereas non-racialized students are underrepresented at this institution.

Table 5

*Socio-Demographic Characteristics of the Respondents (*N = *491)*

Characteristic	Category	Non-Racialized (*n* = 79, 15.9%)		Racialized (*n* = 413, 84.1%)	
		n	%	n	%
Gender/Sex	Men	20	25.6	88	21.4
	Women	57	75.3	323	78.4
	Other	2	1.5	1	0.2
Age group (Years)	18-20	32	41.0	218	52.8
	21-30	35	44.9	163	39.5
	31-40	8	10.3	23	5.6
	41-50	0	0.0	5	1.2
	50-65	3	3.8	2	0.5
Citizenship	Canadian Citizen (by birth)	64	82.1	245	59.3
	Naturalized Canadian	11	4.1	105	25.4
	Other	3	3.8	69	16.7
Ethnic Identity	Other Canadian	7	9.0	98	23.7
	Canadian	57	73.1	175	42.4
	Chinese Canadian	0	0	17	4.1
	South Asian Canadian	0	0	86	20.8
	Caribbean Canadian	0	0	29	7.0
	European Canadian	7	9.0	0	0
Response to question: Is your culture important to you?	Very unimportant	2	2.6	36	8.7
	Somewhat unimportant	3	5.1	30	7.3
	Somewhat important	43	55.1	122	29.5
	Very important	22	28.2	213	51.6
	I do not know	7	9.0	10	2.4
Student Status at York University	Undergraduate	65	83.3	374	90.6
	Graduate (Master's or PhD)	10	12.8	22	5.3
	International	1	1.3	10	2.4
Living Situation	I live on campus	10	12.8	16	3

	I live with my family	48	61.5	328	79.4
	I live off campus	20	25.6	69	16.7
Used counselling services	No	69	88.5	377	91.3
	Yes	9	11.5	36	8.7
Used online information	No	78	100.0	404	97.8
	Yes	0	0.0	8	1.9
Response to question: Has any one in your family sought help from a medical help professional, for mental health issue?	Yes	41	52.6	63	15.3
	No	26	33.3	298	72.2
	I do not know	22	14.1	51	12.3
Reasons for not using counselling services at York	Unaware of services provided	19	24.4	134	32.8
	Hours of the services operation	6	7.7	19	4.7
	Counsellors do not relate to my personal/emotional problems	4	5.1	29	7.1
	I cannot relate to the counsellors due to my cultural background	1	1.3	17	4.2
	All of the above	4	5.1	23	5.6
	None of the above	44	56.4	186	45.0
Previous diagnosis	Learning disability	9	11.5	29	7.0
	Physical disability	2	2.6	12	2.9
	Anxiety Issues	48	61.5	227	55.0
	Depression	29	37.2	118	28.6
	Other (e.g. Stress)	5	6.4	8	1.9

The division between non-racialized and racialized students used in this study encompassed a very wide range of ethnic/racial diversity. This wide diversity is represented in Figure 4 by a pie diagram. The non-racialized students representing the non-racialized group constituted 15.9%. The pie diagram illustrates that the most frequent racialized groups

in the sample were Asian/Southern (31.2%); Black/African (12.0%); Black/Not defined (7.7%); Asian/Middle Eastern (7.1%); Asian/Eastern (4.9%). The sample contained lower proportions of Asian/Filipino (4.3%); Black/Caribbean (3.7%); Mixed Race (3.1%); Hispanic (2.4%); Asian/Afghan (2.2%); Black/African American (1.8%); Black/East African (1.6%). The least frequent racialized groups were Asian/Not defined (1.0%); Asian/South Eastern (0.6%) and Asian/Indo-Caribbean (0.4%).

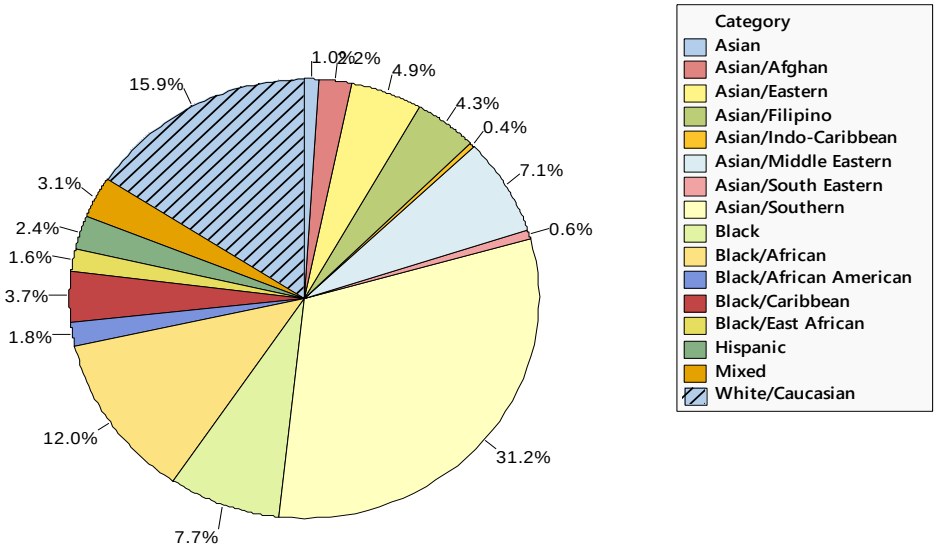


Figure 4. Pie diagram to illustrate the racial/ethnic diversity of the sample (N = 491)

The majority of students in the non-racialized group (75.3%) and the racialized students (78.4%) were women. The students ranged widely in age from 18 to 65 years. The predominant age groups were 18 to 20 years, and 21 to 30 years, collectively representing 82.9% of the non-racialized students, and 92.3% of the racialized students. The proportion

of Canadian citizens by birth was higher in the non-racialized students (82.1%) compared to the racialized students (59.3%).

The proportion of naturalized Canadians was higher in the racialized students (25.4%) than in the non-racialized students (4.1%). Most of the students in the non-racialized group (73.1%) usually thought of their ethnic identity as Canadian. Among the racialized students, less than half of the students (42.4%) usually thought of their ethnic identity to be Canadian. The most common other ethnic identities reported in the racialized group were South-Asian Canadian (20.8%) and Other Canadian, including African and Middle Eastern (23.7%). In response to the question "Is your culture important to you?" the most common response in the non-racialized group was "Somewhat important" (55.1%) whereas the most common response in the racialized group was "Very Important" (51.6%).

The majority of the students in the non-racialized students (83.3%) and the racialized students (90.6%) were undergraduates at York respondent. Only 11 respondents reported their status as International student, of which the majority (10, 2.4%) were in the racialized students. The most common living situation was "I live with my family" among both the non-racialized students (61.5%) and the racialized students (79.4%) with the family income of $54,000 per year. On average 60% of the parents of both racialized and non-racialized had some form of university education (technical post secondary to graduate education). The least common living situation was "I live on campus" among both the non-racialized students (12.8%) and the racialized students (3.0%) where the average income of students were approximately $ 750 per month.

Only a small proportion of the non-racialized students (11.5%) and the racialized students (8.7%) reported that they had used the counselling services at York University. None of the non-racialized students and only 1.9% of the racialized students had used the online mental health/APP information system at York University. In response to the question "Has any one in your family sought help from a medical help professional for a mental health issue?" the majority of the non-racialized students replied "Yes" (52.6%) whereas the majority of the racialized students replied "No" (72.2%).

In response to the item "I have not used the counselling services at York University due to..." the most frequent response was "None of the above" by the non-racialized students (56.4%) and the racialized students (45.0%). The next most frequent response was "Unaware of serviced provided" by the non-racialized students (24.4%) and the racialized students (32.8%). Only a few both racialized and non-racialized students appeared to use the counselling services, and most of the students could not explain (or were not provided with a valid category for their answer) why they did not use these services. However, there was a high level of previous diagnoses of mental health issues among both the non-racialized and racialized students, including anxiety (61.5% and 55.0%) and depression (37.2% and 28.6%) respectively.

Descriptive Analysis

Table 6 presents the reliability statistics for the ten continuous level variables computed using the data collected from $N = 491$ students. The reliability of all ten variables (Cronbach's

alpha = .71 to .94) was very good. Table 7 presents the descriptive statistics for the ten variables.

Table 6

Internal Consistency Reliability

Variable	*Cronbach's alpha*
Attitudes Toward Seeking Help	.71
Expertness of Professionals	.74
Informal Help Seeking	.75
Stigma	.76
Intention to Seek Help	.81
Identification with Mainstream Culture	.87
Race Related Stress	.87
Identification with Heritage Culture	.92
Depression Symptoms	.92
Anxiety Symptoms	.94

Table 7

Descriptive Statistics for Continuous Level Variables (N = 491 students)

Variable	*Min*	*Max*	*Mdn*	*M*	*SD*	*Skew*
Attitudes Toward Seeking Help	10.00	40.00	26.84	26.94	5.04	-.05
Informal Help Seeking	0.00	68.00	35.98	35.65	10.09	.06
Intention to Seek Help	1.00	6.00	3.76	3.77	1.06	-.09
Stigma	1.00	5.88	2.66	2.76	0.79	.61
Expertness of Professionals	1.00	6.00	4.38	4.35	1.01	-.36
Identification with Heritage Culture	1.00	9.00	6.83	6.53	1.65	-.69
Identification with Mainstream Culture	1.00	9.00	6.57	6.42	1.35	-.62
Race Related Stress	0.00	22.00	4.64	5.42	4.43	1.07
Anxiety Symptoms	0.00	63.00	10.34	14.30	12.32	1.07
Depression Symptoms	0.00	52.00	20.62	21.05	11.62	.24

The minimum and maximum values indicated that the respondents utilized the full widths of the measurement scales. The median and mean values were in close proximity, and the skewness statistics were generally ≤ 1, reflecting the normal distribution of the ten variables.

Table 8 displays the mean scores ± 95% CI for the ten variables classified by the two groups of students (racialized and the non-racialized). The lack of overlaps between the 95% CI reflected significant differences between the mean scores. The mean score for Attitudes Toward Seeking Help was significantly higher among the non-racialized students (M = 28.56) than the racialized students (M = 26.63). The mean score for Race Related Stress was significantly higher among the racialized students (M = 5.95) than among the non-racialized students (M = 2.61)

Table 8

Comparison of the Mean Scores of Non-Racialized vs Racialized Students

Variable	Racial/Ethnic Group					
	Non-Racialized (N = 78)			Racialized (N = 413)		
	M	Lower 95% CI	Upper 95% CI	M	Lower 95% CI	Upper 95% CI
Attitudes Toward Seeking Help	28.56*	27.29	29.84	26.63*	26.16	27.10
Informal Help Seeking	34.60	32.30	36.90	35.85	34.87	36.82
Intention to Seek Help	4.09	3.84	4.35	3.70	3.60	3.81
Stigma	2.56	2.40	2.73	2.80	2.71	2.87
Expertness of Professionals	4.44	4.23	4.66	4.32	4.22	4.42
Identification with Heritage Culture	6.18	5.85	6.50	6.60	6.43	6.76
Identification with Mainstream Culture	6.69	6.42	6.97	6.36	6.23	6.49
Race Related Stress	2.61*	1.83	3.40	5.95*	5.53	6.38
Anxiety Symptoms	13.39	10.87	15.91	14.47	13.26	15.68

Depression Symptoms	19.07	16.22	21.93	21.42	20.32	22.52

*Note: * 95% CI do not overlap, reflecting significant differences between the mean scores*

High levels of depression and anxiety symptoms were reported by both the racialized non-racialized students. The proportion of students with CES-D scores > 16 (indicating that may suffer from depression) was higher among the racialized students (n = 265, 64.2%) than the non-racialized students (n = 39, 50.0%). About half of the racialized students (n = 202, 48.9%) had BAS scores > 10 indicating that they may suffer from anxiety. About half (n = 38, 48.7%) of the non-racialized students also had BAS scores > 10 indicating that they may suffer from anxiety. The remainder of this chapter presents the statistical evidence used to test the eight stated hypotheses.

Hypothesis 1

This section presents the statistical evidence to test the multivariate hypotheses:

1(a): Men gender/sex; membership of a racialized group; and ethnic identity associated with a heritage culture will be predictors of a lower level of attitudes towards help seeking;

1.(b): Younger respondents in the age group 18-25 years will predict a lower level of attitudes towards help seeking;

1.(c): Previous diagnosis will be a predictor of a higher level of attitudes towards help seeking.

The results of multiple regression analysis are presented in Table 9. The effect size (R^2 = .055) indicated that the model had practical medium significance.

Table 9

Multiple Regression to Predict Attitudes Toward Seeking Help (N = 491 Students)

Independent Variables	β	*p*
Racial/Ethnic Group (1 = Racialized; 0 = Non-racialized)	-.129	.005*
Gender/Sex (1 = Men; 0 = Women)	-.077	.105
Ethnic Identity (1 = Canadian; 0 = Not Canadian)	-.012	.793
Age (1 = 18 to 25 years; 2 > 25 years)	.121	.007*
Previous Diagnosis (1 = Yes, 0 = No)	.107	.023*

Note: * Statistically significant predictor ($p < .05$). $R^2 = .055$

When the student group was coded by 1 (i.e., racialized) then score for Attitudes Toward Seeking Help was lower (β = -.129) than when the group was coded by 0 (i.e., non-racialized). When the age of the student was older (26 to 65 years) then the score for Attitudes Toward Seeking Help (β = .121) was higher than when the student was younger (18-25 years old). When Previous Diagnosis was coded by 1 (i.e., the student suffered from anxiety, depression, or other health issues) then the score for Attitudes Toward Seeking Help was higher (β = .107) than when Previous Diagnosis was coded by 0 (i.e., the student did not suffer from anxiety, depression, or other health issues). Gender/sex was not a significant predictor of Attitudes Toward Seeking Help.

Hypothesis 2

This section presents the statistical evidence to test Hypothesis 2.: For racialized students, male gender/sex, identification with the heritage culture, associated with ethnic identity and race-related stress, will be predictors of:

2.(a): Increased levels of depression and anxiety;

2. (b): Increased levels of stigmatization;

2.(c): More negative attitudes toward help seeking;

2.(d): A lower level of intentions to seeking help.

Hypothesis 2(a)

The results of multiple regression analysis are presented in Table 10.

Table 10

Multiple Regression to Predict Depression Symptoms (N = 413 Racialized Students)

Independent Variables	β	p
Identification with Heritage Culture (1 = Yes; 0 = No)	-.146	<.004*
Gender/Sex (0 = Women; 1 = Men)	.108	.026*
Race Related Stress	.213	<.001*
Ethnic Identity (0 = Not Canadian; 1 = Canadian)	.044	.834

Note: * Statistically significant predictor ($p < .05$).

The effect size ($R^2 = .055$) reflected practical medium significance. Identification with Heritage Culture, Race Related Stress and Gender/sex were significant ($p < .05$) predictors of Depression Symptoms among the racialized students. When the Identification with Heritage Culture score increased by 1.0 then Depression Symptoms decreased (β = -.146). When the student was men the depression symptoms were higher (β = .108) than when the student was women. When the Race Related Stress Score increased by 1.0 then the Depression Symptoms increased (β = .213).

The multiple regression model to predict Anxiety Symptoms in Table 11 had practical strong significance ($R^2 = .073$). Identification with the Heritage Culture, Gender/sex, and Race Related Stress were significant predictors of Anxiety Symptoms among the racialized group. When the Identification with Heritage Culture score increased by 1.0 then Anxiety Symptoms decreased (β = -.113). When the student was male the depression symptoms were higher (β =

.241) than when the student was female. When the Race Related Stress Score increased by 1.0 then the Depression Symptoms also increased (β = .071).

Table 11

Multiple Regression to Predict Anxiety Symptoms (N = 413 Racialized Students)

Independent Variable	β	*p*
Identification with Heritage Culture (1 = Yes; 0 = No)	-.113	.023*
Gender/sex (0 = Women; 1 = Men)	.241	.022*
Race Related Stress	.071	<.001*
Ethnic Identity (0 = Not Canadian; 1 = Canadian)	.050	.189

Note: * Statistically significant predictor (p < .05).

Hypothesis 2 (b)

The multiple regression model to predict Stigma in Table 13 had practical strong significance (R^2 = .070). Identification with Heritage Culture, Gender/sex, Race Related Stress, were significant predictors of Stigma among the racialized students. When Identification with Heritage Culture increased by 1 the Stigma score increased (β = .216). When the Gender was coded by 1 (i.e., Male) then the Stigma score was greater (β = .112) than when the Gender was coded by 0 (i.e., Female). When the Race Related Stress score increased by 1.0 unit then the Stigma Score also increased (β = .180).

Table 12

Multiple Regression to Predict Stigma (N = 413 Racialized Students)

Independent Variable	β	*p*
Identification with Heritage Culture (1 = Yes; 0 = No)	.216	048*
Gender/sex (0 = Women; 1 = Men)	.112	.012*
Race Related Stress	.180	<.001*

Ethnic Identity (0 = Not Canadian; 1 = Canadian)	.-.046	.317

Note: * Statistically significant predictor ($p < .05$).

Hypothesis 2(c)

The multiple regression model in Table 14 had little practical significance ($R^2 = .016$). Identification with Heritage Culture, Gender/sex, Race Related Stress, and Ethnic Identity were not significant predictors of Attitudes Toward Seeking Help ($p > .05$).

Table 13

Multiple Regression to Predict Attitudes Towards Seeking Help (N = 413 Racialized Students)

Independent Variable	β	*p*
Identification with Heritage Culture (1 = Yes; 0 = No)	-.028	.576
Gender/sex (0 = Women; 1 = Men)	-.072	.145
Race Related Stress	-.099	.056
Ethnic Identity (0 = Not Canadian; 1 = Canadian)	-.036	.479

Note: * Statistically significant predictor ($p < .05$).

Hypothesis 2(d)

The multiple regression model in Table 15 displays little and no significant predictors of Help Seeking Intention among the racialized students with negligible practical significance ($R^2 = .004$).

Table 14

Multiple Regression to Predict Help Seeking Intention (N = 413 Racialized Students)

Independent Variable	β	*p*
Identification with Heritage Culture (1 = Yes; 0 = No)	-.061	.230
Gender/sex (0 = Women; 1 = Men)	-.054	.276
Race Related Stress	-.081	.103

Ethnic Identity (0 = Not Canadian; 1 = Canadian)	-.041	.415

Note: * Statistically significant predictor ($p < .05$).

Hypothesis 3

This section presents the statistical evidence to test Hypothesis 3: For non-racialized students, men, identification with the heritage culture, correlated with ethnic identity and race-related stress, will NOT be predictors of:

3.(a): Increased levels of depression and anxiety;

3. (b): Increased levels of stigmatization;

3.(c): More negative attitudes toward help seeking;

3.(d): A lower level of intentions to seeking help.

The results of multiple regression analysis are presented in in Tables 16 to 20. The R^2 values were consistently < .04, reflecting little or no practical significance. The regression statistics supported the hypotheses that Identification with Mainstream Culture, Ethnic Identity, and Race Related Stress were not significant predictors of depression, anxiety, stigmatization, attitudes toward help seeking help, or intentions to seeking help among the non-racialized students. However, non-racialized male students reported that they suffered from less depression (β = -.287) and less anxiety (-.263) than non-racialized female students.

Table 15

Multiple Regression to Predict Depression Symptoms (N = 78 Non-Racialized Students)

Independent Variable	β	*p*
Identification with Mainstream Culture	-.131	.259
Gender/sex (0 = Women, 1 = Men)	-.287	.015*
Ethnic Identify (0 = Not Canadian, 1 = Canadian)	.139	.216

Race Related Stress	.134	.237

Note: * Statistically significant predictor ($p < .05$). $R^2 = .032$

Table 16

Multiple Regression to Predict Anxiety Symptoms (N = 78 Non-Racialized Students)

Independent Variable	β	*p*
Identification with Mainstream Culture	.006	.962
Gender/sex (0 = Women, 1 = Men)	-.263	.029*
Ethnic Identify (0 = Not Canadian, 1 = Canadian)	-.269	.788
Race Related Stress	.086	.456

Note: * Statistically significant predictor ($p < .05$). $R^2 = .023$

Table 17

Multiple Regression to Predict Attitudes Towards Help Seeking (N = 78Non-Racialized Students)

Independent Variable	β	*p*
Identification with Mainstream Culture	.117	.324
Gender/sex (0 = Women, 1 = Men)	-.210	.078
Ethnic Identify (0 = Not Canadian, 1 = Canadian)	.105	.357
Race Related Stress	.272	.787

Note: $R^2 = .030$

Table 18

Multiple Regression to Predict Help Seeking Intentions (N = 78 Non-Racialized Students)

Independent Variable	β	*p*
Identification with Mainstream Culture	.022	.114
Gender/sex (0 = Women, 1 = Men)	-.056	.256
Ethnic Identify (0 = Not Canadian, 1 = Canadian)	.030	.548
Race Related Stress	-.077	.118

Note: $R^2 = .015$

Table 19

Multiple Regression to Predict. Stigma (N = 78 Non-Racialized Students)

Independent Variable	β	*p*
Identification with Mainstream Culture	.027	.811
Gender/sex (0 = Women, 1 = Men)	.111	.341
Ethnic Identify (0 = Not Canadian, 1 = Canadian)	.046	.680
Race Related Stress	-.223	.053

Note: R^2 = .032

Hypothesis 4

This section presents the statistical evidence to test Hypothesis 4: Students living in on-campus housing will have higher levels of help-seeking attitudes and lower levels of stigma compared to students living off campus. Residing on campus may provide students to become free agents and be motivated to seek mental help. The results of ANOVA and the descriptive statistics are presented in Tables 21 and 22.

Table 20

ANOVA for Attitudes Toward Seeking Help and Stigma vs. Living Situation (N = 491 Students)

Dependent Variable	F	p	R^2
Attitudes Toward Seeking Help	7.092	.001*	.048
Stigma	1.258	.285	.005

Note: Significant difference (p < .05)

Table 21

Descriptive Statistics: Attitudes Toward Seeking Help and Stigma vs. Living Situation (N = 491 Students)

Dependent Variable	Independent Variable	*M*	*SD*

Attitudes Toward Seeking Help	I live on campus	25.23	4.96
	I live with my family	28.66*	4.96
	I live off campus	26.61	5.06
Stigma	I live on campus	2.55	0.66
	I live with my family	2.78	0.79
	I live off campus	2.72	0.84

Note: * Scheffe's Post Hoc Test indicated this score was significantly higher ($p < .05$)

The results of ANOVA indicated that living situation was not associated with stigmatization. However, the mean scores for Attitudes Toward Seeking Help were significantly higher ($p < .05$) among the students who lived with their family ($M = 28.66$), compared with the students who lived on or off campus. The effect size ($R^2 = .048$) reflected low practical significance.

Hypothesis 5

This section presents the statistical evidence to test Hypothesis 5: The York University Counselling Centre will be utilized more by non-racialized students than racialized students. Table 23 presents the results of a Chi-Square Test. Only 9 of the non-racialized students, and 36 of the racialized students used the Counselling Centre. Pearson's Chi Square test indicated that there was no significant association between the use of the Counselling Centre and the Racial/Ethnic Group ($p > .05$), with a negligible effect size (Cramer's $V = .036$).

Table 22

Chi-Square Test: Use of Counselling Centre vs. Racial Identity (N = 491 Students)

Use of Counselling Centre	Racial/Ethnic Group		Pearson's Chi Square	*p*	Cramer's *V*
	Non-Racialized	Racialized			

No	69 (88.4%)	377(91.3%)	0.628	.428	.036
Yes	9 (11.5%)	36 (8.7%)			

Hypothesis 6

This section presents the statistical evidence to test Hypothesis 6: Informal help seeking behaviour will be more prevalent among racialized students compared to non-racialized students. The descriptive statistics and the results of ANOVA presented in Table 24 do not support Hypothesis 6. The mean score for Informal Help Seeking Behaviour was not significantly different between the racialized and the non-racialized students ($p > .05$) with a negligible effect size ($R^2 = .002$).

Table 23

ANOVA for Informal Help Seeking Behaviour vs. Racial Students

Dependent Variable	Racial students	*M*	*SD*	*F*	*p*	R^2
Informal Help Seeking Behaviour	Non-Racialized	34.60	10.20	1.01	.316	.002
	Racialized	35.85	10.06			

Table 25 indicates that the two groups of students provided similar likeliness scores for the individual types of people who they might seek help or advice from if they were experiencing a personal or emotional problem (where 1 = Extremely Unlikely; 3 = Unlikely; 5 = Likely; and 7 = Extremely Likely) The mean scores > 5 indicated that partners and friends were the people that the students were most likely to seek help or advice from if they were experiencing a personal or emotional problem. The mean scores between 3 and 4 indicated

that mental health professionals, relatives/family members, and doctors/GPs were less likely to be consulted. The mean scores between 1 and 3 indicated that professors/academic advisors, phone helplines, ministers or religious leaders, and chat rooms were the least likely sources of help or advice.

Table 24

People Who the Students Might Seek Help or Advice From

People who they might seek help or advice from if they were experiencing a personal or emotional problem.	Student			
	Non-Racialized		Racialized	
	M	*SD*	*M*	*SD*
Partner (e.g. boyfriend or girlfriend)	5.18	2.10	4.92	2.00
Friend (not related to you)	5.18	1.63	4.97	1.75
Mental health professional	3.96	1.83	3.71	1.77
Relative/family member	3.82	1.20	3.91	1.94
Doctor/GP	3.50	1.87	3.42	1.88
Professor/Academic Advisor	2.68	1.57	2.93	1.63
Phone helpline	2.29	1.55	2.60	1.60
Minister or Religious Leader	2.09	1.72	2.90	1.97
Chat rooms	1.60	.99	2.18	1.53

Hypothesis 7

This section presents the statistical evidence to test Hypothesis 7: International students will have poorer treatment seeking attitudes and higher stigma compared to Canadian citizens/permanent residents. The descriptive statistics and the results of ANOVA presented in Table 26 do not support Hypothesis 7. The mean scores for Informal Attitudes Toward Seeking Help and Stigma were not significantly different between the Canadian students and the International students ($p > .05$) with negligible effect sizes.

Table 25

ANOVA for Attitudes Toward Seeking Help and Stigma vs. Student Status

Dependent Variable	Independent Variable	*M*	*SD*	*F*	*p*	R^2
Attitudes Toward Seeking Help	Canadian student	26.92	5.06	0.164	.686	.000
	International student	27.54	4.16			
Stigma	Canadian student	2.76	0.79.	0.726	.394	.001
	International student	2.56	0.57			

Hypothesis 8

This section presents the statistical evidence to test Hypothesis 8: Information on E-Mental health technology will be utilized by both racialized students and non-racialized students for help seeking behaviour. The cross-tabulation of the frequencies and the results of a Chi-Square test presented in Table 27 do not support Hypothesis 8.

Table 26

Chi-Square Test: Use of Online Information System vs. Racial Identity

Use of Online Information System	Students		Pearson's Chi Square	*p*	Cramer's *V*
	Non-Racialized	Racialized			
No	78 (100.0%)	404 (97.8%)	1.54	.215	.036
Yes	0 (0.0%)	8 (1.9%)			

The number of non-racialized students who reported that they used the online information at York University was zero. Only a few (n = 8, 1.9%) of the racialized students reported that they used the online information system. Pearson's Chi Square test indicated that

there was no significant association ($p > .05$) between the use of the online information system and the racial students, with a very small effect size (Cramer's V = .036).

Hypothesis 9

Hypothesis 9 proposed that Attitudes Toward Seeking Help (ATSH), Intention to Seek Help (ITSH); and Informal Help Seeking Behavior (INHS) will be positively correlated with each other, but negative correlated with behavioral control (i.e., stigmatization). Table 28 presents the evidence to support Hypothesis 9 by the statistically significant (p <. 001) coefficients in the correlation matrix. The Pearson's correlation coefficients between ATSH, ITSH, and INHS were positive, while the correlations between these three variables and STIG were negative.

Table 27

Correlation Matrix

	ATSH	ITSH	INHS	STIG
ATSH	1			
ITSH	.671*	1		
INSH	.322*	.289*	1	
STIG	-.399*	-.170*	-.100*	1

Note: * Significant correlation (p < .001)

Summary of Results

Socio-demographic Characteristics of the Respondents

A total of $N = 570$ students responded to the survey, of which $n = 491$, 86.1% completed the items in the Attitudes Toward Seeking Professional Help Scale; Beliefs About Psychological Services Scale; Vancouver Index of Acculturation; Race-Related Events Scale;

Centre for Epidemiological Studies Depression Scale, and Beck Anxiety Inventory, as well as reporting their racialized status and ethnic identity.

The division between non-racialized and racialized students used in this study encompassed a very wide range of ethnic/racial diversity. The non-racialized students constituted 15.9%. The majority of students in the non-racialized students and the racialized students were female. The predominant age groups were 18 to 30 years, collectively representing 82.9% of the non-racialized students, and 92.3% of the racialized students. The relationship status of the vast majority of the students in the non-racialized students and the racialized students was single. The proportion of Canadian citizens by birth was higher in the non-racialized students compared to the racialized students.

Descriptive Analysis

The frequency distributions of the continuous (interval level) variables measured with seven instruments reflected normality. The internal consistency reliability of all the variables was good. The mean score for Attitudes Toward Seeking Help was higher among the non-racialized students than the racialized students. The mean score for Race Related Stress was higher among the racialized students than among the non-racialized students.

Hypothesis 1

1(a): Men gender/sex; membership of a racialized group; and identification with heritage culture were predictors of a lower level of attitudes towards help seeking;

1.(b): Younger respondents in the age group 18-25 years predicted a lower level of attitudes towards help seeking;

1.(c): Previous diagnosis was a predictor of a higher level of attitudes towards help seeking.

Hypothesis 2

For racialized students, men gender/sex, identification with the heritage culture, and race-related stress, were predictors of:

2.(a): Increased levels of depression and anxiety;

2. (b): Increased levels of stigmatization.

However, for racialized students, men gender/sex, identification with the heritage culture, and race-related stress, were not predictors of:

2.(c): More negative attitudes toward help seeking;

2.(d): A lower level of intentions to seeking help.

Hypothesis 3

For non-racialized students, men gender/sex, identification with the heritage culture, associated with ethnic identity and race-related stress, were NOT be predictors of:

3.(a): Increased levels of depression and anxiety;

3. (b): Increased levels of stigmatization;

3.(c): More negative attitudes toward help seeking;

3.(d). A lower level of intentions to seeking help.

For non-racialized students, mainstream acculturation, ethnic identity, and race-related stressors were not statistically significant predictors of depression, anxiety, and stress nor of attitudes towards help seeking or intentions towards seeking counseling.

Hypothesis 4

The mean scores for Attitudes Toward Seeking Help were significantly higher among both racialized and non-racialized students who lived with their family, compared with the students who lived off or on campus.

Hypothesis 5

There was no significant association between the use of the Counselling Centre and the racial and non-racialized students. Only a small proportion of the students reported that they had used the counselling services at York University. Although only a few students used these services, there was a high level of previous diagnoses of mental health issues among the non-racialized and racialized students, including anxiety and depression.

Hypothesis 6

The mean score for Informal Help Seeking Behaviour was not significantly different between the racialized and the non-racialized students.

Hypothesis 7

The mean scores for Informal Attitudes Toward Seeking Help and Stigma were not significantly different between the International students and the Canadian students.

Hypothesis 8

None of the non racialized students and only a few (1.9%) of the racialized students used the online information system. There was no significant association between the use of the online information system and the racial and non-racialized students.

Hypothesis 9

Significant positive correlations were found between Attitudes Toward Seeking Help, Informal Help Seeking, and Intention to Seek Help. These three variables were significantly negatively correlated with Stigma.

CHAPTER 5: DISCUSSION AND CONCLUSION

Introduction

This chapter presents a discussion of the results, and includes the following eight sections: (1) Retroduction of Results; (2) Theoretical Implications of the Results; (3) Practical Implications of the Results; (4) Limitations of the Results; (5) Framework for an Equity Focused Mental Health Policy in a University Environment; (6) Equity by Electronic Social Mediums in a University Environment; (7) Recommendations for Future Research; and (8) Conclusion.

Retroduction of the Results

This section presents an interpretation of the descriptive and inferential statistics reported in Chapter 4 in the context of the existing literature on previous studies reviewed in Chapter 1. Emphasis was given to discussing the various factors that explain why the attitudes and beliefs towards mental health help seeking behaviour differ between racialized and non-racialized students at York University.

Mental Health and Racialization Help Seeking Behaviour at York University

Help-seeking behaviors are very complex for racialized students who experience multiple forms of discrimination based on gender/sex, income, immigration status, stigma, race, ethnicity, class, living situation and age. The results of the descriptive analysis in hypotheses 1 (a), and 2 (a) revealed that the proportions of students with CES-D scores > 16 (indicating that they suffered from clinical depression), at York University was higher in the racialized group compared to the non-racialized group. Furthermore, the regression analysis indicated that

identification with heritage culture and race related stress were statistically significant predictors of depression symptoms among the racialized students. However, as cited in hypothesis 3 for the non-racialized students, mainstream acculturation, ethnic identity, and race-related stressors were not statistically significant predictors of depression due to their social and cultural privileges belonging to the dominant non-racialized Canadian society.

These findings are consistent with other surveys concluding that racialized students are significantly more likely to report depressive symptoms than non-racialized students (Morgan et al, 2006). The empirical evidence indicates that depression is correlated with many other variables of interest to this study, including stigmatization related to mental health (Link et al., 2001; Corrigan, 2007). The reasons for the high incidence as demonstrated by hypothesis 1 (a) and 2 (a) of depression among racialized students may include racism process stigmatization associated with acculturation (Link et al., 2001); experience of racial discrimination (Borges et al., 2011; Joseph, 2015); and gender role conflict (Good & Wood, 1995).

The descriptive analysis revealed in hypothesis 2 (b) that the mean scores for "Attitudes Toward Seeking Help," "Intention to Seek Help," "Identification with Mainstream Culture," and "Race Related Stress" were significantly lower in the racialized students at York University than in the non-racialized group. Furthermore, the mean score for "Stigma" was significantly higher in the racialized students than in the non-racialized students as hypothesis 2 (b) and hypothesis 9. Regression analysis indicated that a high level of stigma was a significant predictor of lower attitudes towards help seeking and lower intentions towards seeking mental

health counseling amongst racialized students. Similarly, Rao, Feinglass, and Corrigan (2007), found that racialized students at a community college in USA exhibited greater stigma than non-racialized students. These findings are consistent with several previous studies concluding that stigmatization related to mental health is an important predisposing characteristic acting as a barrier to the use of mental health services by racialized students (Gary, 2005; Gary et al., 2003; Ting & Hwang, 2010).

The results of this survey indicated that the mean score for "Attitudes Toward Seeking Help" among the men racialized students was lower than the mean scores for the women in both the racialized and non-racialized students. Furthermore, the "Stigma" scores were higher among both racialized and non-racialized men students as indicated by hypothesis 9. These findings were consistent with the conclusion that men tend to be more reluctant to seek professional help for mental health issues than women (Mahalik & Rochlen, 2006). Racialized men in particular tend to have a lower rate of mental healthcare utilization than racialized women (Wang et al., 2007). In attempting to not lose face by admitting that they have personal-emotional problems, racialized men students may demonstrate their confirmation of dominant masculine roles (Leong, Kim, & Gupta, 2011). Further, this study established that gender and sex play an important role in help seeking behaviour. Mental health actions are socially structured behaviours, practiced in the same way as other social and cultural activities (Smith et al., 2013). As a result, the "doing of health" is the doing of masculinity/femininity gender/sex role stereotype fulfilment (Courtenay, 2000a). The "doing" of help-seeking is consistent with the norms of hegemonic masculinity and traditional femininity and thus reflect the gender/sex

role stereotypes of a given time and place (Courtenay, 2000a) as indicated by hypothesis 2 and hypothesis 3. Hence this study is supported by the scholarly literature that has consistently shown that men seek help less frequently than women and that racialized men are even less likely than non-racialized men to seek help (Smith et al 2013; Wang et al., 2007; Mahalik & Rochlen, 2006). While racialized women also seek help less frequently than non-racialized women, they seek help more frequently than racialized men. However, as indicated in hypothesis 4 racialized women's help-seeking involved informal supports from friends and family members. These connections are often vital for racialized women because it provides much needed non-professional support and creates bonding among them. This could be emphasized as being a very supportive behaviour from cultural safety perspective.

Thus, understanding help-seeking using a critical realist paradigm illustrates that mental health risks emerge because they are linked with the sanctioning of hegemonic practices (e.g., risk taking), (Courtenay 2000a; White, 2002). As a result, so called "normal" (i.e., in line with gender stereotypes) mental health behaviours are not healthy for men because dominant masculine behaviour discourages help-seeking and racialized men students are meant to acculturate to the wider world view of the Canadian non-racialized male students. For non-racialized women students, the situation is somewhat better, since dominant femininity in Canadian society encourages help-seeking, but racialized women's experiences (racism, discomfort with lack of cultural safety) with the health care system often prevents help-seeking from professionals. The concept of cultural safety is particularly relevant to mental health professionals as it seeks to promote cultural integrity and the promotion of social justice, equity

and respect. It dictates that mental health professionals should be aware of a person's cultural background and the impact of colonialism and racism on mental health and strive to create an environment that is safe and supportive (McGough et al, 2018).

Age is also an important variable in help-seeking for both sexes as postulated by hypothesis 1 (b). The predominant age group of the students at York University who participated in the survey was 18 to 30 years, collectively representing 82.9% of the non-racialized students, and 92.3% of the racialized students. The older students (age 26 to 65 years) in the racialized students tended to have higher scores for "Attitudes Toward Seeking Help" than the both racialized and no-racialized students (age 18 to 25 years). Previous studies have concluded that students in the ages of 18-25 years represent at-risk for all groups due to high risk of mental health issues with associated with low help-seeking rates (Rickwood, Deane, & Wilson, 2007; Zachrisson, Rodje, & Mykletun, 2006). There may be links between age and help-seeking behavior for mental health issues informed by variants in attitudes towards mental health issues between different cultures and generations.

Research on racialized groups (Paniagua & Yamada, 2013; Wang, Lin, Pang, & Shen, 2007; Rao, Feinglass, and Corrigan, 2007) has indicated that family and friends strongly influence help-seeking. In this study, family and friends were also important and influenced participants to engage in help-seeking behaviour. In the survey, the mean scores for Attitudes Toward Seeking Help were significantly higher among the students at York University who lived with their family, compared with the students who lived off or on campus. This finding was surprising as we assumed that students living on campus might

be more likely to seek help, because of lack of family influence and availability of services.

Interestingly, this study and the survey revealed that the racialized students did not appear to use more informal health seeking behaviour than the non-racialized students. Partners and friends were the people from whom both racialized and non-racialized students were most likely to seek help or advice if they were experiencing mental health issues as indicated by hypothesis 4. Mental health professionals, relatives/family members, and doctors/GPs were less likely to be consulted. Professors/academic advisors, phone helplines, ministers or religious leaders, and chat rooms were the least likely sources of help or advice. York University Counselling Centre did not have a significant impact on either non-racialized students or racialized students as indicated by hypothesis 5.

These findings support the suggestion that social support from friends and family members may be important to lay the foundation for help seeking behaviour. Several researchers (Vogel et al., 2007; Chadda, et al., 2001; Gulliver et al., 2010; Gulliver et al., 2012) postulated that most people including racialized and non-racialized students who engaged in therapy for mental health care are more acceptable when a designate (e.g. parent or partner) advocates for help seeking. Therefore, social support and positive reinforcement appears to be a facilitator of help seeking behaviour.

Further, this survey as pontificated by hypothesis 1(c) revealed that previous diagnosis was a statistically significant predictor of "Attitudes Toward Seeking Help." This finding is consistent with other studies concluding that previous experiences may increase the potency to

influence both non-racialized and racialized students' decision to seek help for mental health issues (Surgenor, 1985; Jorm et al., 2000). Unfortunately, racialized students seek less help from mental health professionals. This could also be a positive behaviour, given the nature of the deplorable history of how racialized people generally have been mentally misdiagnosed by mental health professionals and mistreated within the mental health system (Jorm et al., 2000). Therefore, its was assumed in this study that social and electronic medium (that can provide cultural safety through language and religion) would be utilized by both groups of students especially racialized students.

Electronic media have become increasingly popular, at least with respect to their development and proliferation. However, as indicated by hypothesis 8, the survey revealed that very few students used the online information system at York University to obtain help about mental health issues. There was no significant association between the use of the online information system between racialized and non-racialized students. This finding was not consistent with previous studies concluding that students of all racial backgrounds will accept electronic public mental health instruments (EPMHI) as sources of health information (Burns et al., 2010; Christensen & Hickie, 2010a, 2010b; Mackie, 2014). The data illustrates students at York University did not, however, appear to engage EPMHI in order to improve their well-being. More saliently, the vast majority of participants-both racialized and non-racialized students were not aware of the (EPMHI) at York University. Fortunately, York University has been awarded a major research grant of [$866,000] led by Dr. Christo El Morr and his colleagues to facilitate EPMHI and to advance its utilization in a

university and working environments

Theoretical Implications of the Results

This section considers the theoretical implications of the results in the context of the theories and models discussed in Chapter 2. In this study the most significant results in the context of theory was those obtained to test Hypothesis 9. Significant positive correlations were found between Attitudes Toward Seeking Help, Informal Help Seeking, and Intention to Seek Help. These three variables were all negatively correlated with Stigma. The significant correlations between attitudes, intentions, and behaviour supported the Theory of Planned Behaviour model of help seeking (Ajzen & Manstead, 2007). Moreover, the results of the correlation analysis conducted using the data collected in this survey suggested that what the students believed other people might think about seeking professional help for mental health issues, associated with stereotypical societal norms and values. (i.e., their level of stigmatization) may reduce the levels of the students' intentions to seek help as well as the levels of their help seeking behaviour. These findings were consistent with several previous studies concluding that stigmatization is an important predisposing characteristic acting as a barrier to the use of health services by racialized university students (Gary, 2005; Gary et al., 2003; Rao et al., 2007; Ting & Hwang, 2010).

Policy architects in the health and mental health environments have sought to develop explanatory models and theories to understand help-seeking behaviour. This knowledge is meant to assist health professionals, policy makers, researchers, and lay persons in understanding how and when a racialized student utilizes health care for physical and mental

health needs. A significant amount of research has highlighted the prevalence rates of mental health problems in the Canadian non-racialized and racialized students. However, utilization of mental health services varies according to power relations based on positionality related to race and ethnicity with research suggesting that racialized students and racialized population under-utilize mental health services (Abe-Kim et al., 2002; Vogel & Wei, 2005). Further, most of these help seeking theories and models reflect power relationships, western values, the experiences of the dominant non-racialized population, and are based on the principles of individuality. These help-seeking theories lack a structural analysis that considers the social and cultural determinants of mental health.

A review of the psychiatric, psychological and help seeking literature revealed insufficient consensus on the intention and behaviour of seeking help for both health and mental healthcare. Disputes exist in areas of measurement and a unifying theory at the various structural and social/cultural levels. Yet, a few of the theories and models consider the social determinants of mental health which are salient aspects experienced by racialized students and racialized groups. As a result, the SDHTPB framework was developed in this research as an exploratory theory which integrated the TPB with Social and Cultural Determinants and the Social Determinants of Health models/theories. The SDHTPB framework combines attitudes, intentions, and behaviours with the social and cultural determinants of help, to provide a more comprehensive tool for understanding mental health help-seeking behaviour for racialized groups.

The SDHTPB framework illustrates the attitudes of a person towards intended behaviour works together with the perceived behavioural control, or judgments about whether the intended behaviour should be executed or not (e.g., the individual's perceived stigma toward receiving professional help). The framework emphasizes that understanding racialized students' intentions to seek help, is just as important as understanding their attitudes toward seeking help and the context in which they seek help in the dominant society. It is for this reason the framework justifies measuring both intentions to seek help and attitudes toward seeking help in studies concerned with the use of professional psychological services.

Furthermore, the results of this study were consistent with the Social Determinants of Health Theory. The perceived behavioural factors, including gender/sex, age, attitudes, perceived personal norms, and perceived behavioural control integrate for comprehensive understanding of the social determinants of health. At the structural level, the barriers of university policies of counselling services utilization, including lack of counselling/cultural methods may contribute to a lack of help seeking behaviour.

Practical Implications of the Results

This section discusses the practical implications of the results in the context of the significance of the research outlined in Chapter 3. These practical implications are based on the finding that a high proportion of the racialized students at York University reported that they suffered from mental problems including depression, anxiety, and race related stress, that were higher than those recorded in United States (Waddel, Offord, & Sheppard, 2002). This is an important issue to address, in view of the enormous growth of immigrants who become

racialized in Canada from Asia, South Asia, South East Asia, Caribbean, Middle East, African and Latin American Countries. The intersection of depression, anxiety, stigma, race related stress and stigmatization does hinder help-seeking behaviour. Unfortunately, due to structural problems of racism and acculturation, stigma is characteristic among immigrants in North America among racialized students and minority groups (Cepeda-Benito & Short, 1998; Loya, Reddy, & Hinshaw, 2010; Ting & Wang, 2009; Leong, Kim, & Gupta, 2011).

The findings of this study will serve to inform University governance, healthcare professionals, and counsellors that they need to improve their services in order to address the special needs of racialized students at York University and these results can be extended to other universities across Canada. Previous researchers have also recommended an improvement in such services (Beks et al., 2017; Mills, 2010; Mowbray et al., 2006). The ability of professionals to help students develop self-efficacy is a major factor that may help to alleviate the mental health problems of racialized students (Prat-Sala & Redford, 2010).

Policy Implications: Framework for an Equity Focused Mental Health Policy in a University Environment

In periods of fiscal constraint (market values) and neoliberal Ontario conservative government actions, all universities in Ontario including York need to reconsider what mental health policies may enhance collective success and well-being. The use of health equity as an indicator of mental well-being should be a key policy goal at universities. Students at universities come from a variety of social/cultural backgrounds and various experiences. There is unequal distribution of financial and social resources which can manifest as the poor mental health of racialized students, sexual minorities, working poor, and women (Prat-Sala &

Redford, 2010). Further, social distribution shapes how student live, study, learn, work, play and grow, with consequences for mental health. Action on the social determinants can advance students physical and mental health resources and provide a supportive policy environment. Students need the basic material requisites for a decent life and need to have control over their lives while in a university environment.

At York University there is an opportunity to build on the current university wide mental health strategy, by ensuring that equity and the social determinants are integrated into all of the activities stemming from the implementation of the strategy. More strategies are needed to focus on poverty, housing and income insecurity and experiences of discrimination and violence based on race, gender/sex, class, ability and sexuality. Bringing a social determinants and equity focus would support student's mental health in a university environment.

York University administration, student organizations, faculty and unions, can develop educational programs in the classroom for students concerning mental health issues. This action can cultivate an environment that may reduce stigma, stress, anxiety, depression and help seeking behaviour. These courses would use a social determinants and acceptable commitment equity lens to engage students to become ambassadors regarding mental health problems to the wider communities including their families. Additionally, working in concert in the classroom setting may reduce discrimination and racism between the non-racialized and racialized student groups. Operationalising these recommendations requires a combination of coherent policy, multi-sectoral solutions with strong leadership by the mental health sector, and community

level action. Action on the social determinants can advance student's physical and mental health resources and provide a culture safe university environment. The combination of structural factors, and daily living conditions, the social determinants, affect emancipation, freedom and ultimately health and equity. Finally, contemporary public electronic implements may advance equity through structural, personal, social and cultural integration of racialized and non-racialized students and groups by the enhancement of their mental health seeking behaviours.

Electronic Equity by Social Mediums in a University Environment

Humanising population health and health equity creates an environment in which everyone must have a voice to participate. This creates an environment for both racialized and non-racialized student populations to have inputs into decision-making about how university operates; specifically, in relation to new technologies and their impact on health, including help seeking related behaviours of students. Electronic public mental health instruments (EPMHI) are offered online for a broad range of mental disorders especially in a university landscape. Evidence shows that EPMHI have a great impact as an intervention instrument and act as prevention tools (Spek et al., 2007). These EPMHI are global in nature and can reach the targeted population of learners, irrespective of language and culture. Critically, institutional public health instruments and models fail to facilitate access to mental health services for racialized groups in Canada. Conclusively, many racialized students and groups who use EMPHI for health and help-seeking intentions are protected from stigma, discrimination, and

social isolation (Jorm et al., 1997). These instruments provide a platform for health and mental help-behaviour through mental health literacy.

Researchers (Collin et al., 2011; Gulliver et al., 2012) have linked EPMHI to an increase in physical and mhealth literacy and help-seeking behaviour for the general population, especially among young adults. Improvements in health and mental health literacy assist the community, racialized groups, and especially students in recognition and management of health and mental health and may also reduce the self-stigma and public stigma associated with mental illness (Jorm et al., 1997). Historically, person-to-person help-seeking was an important first step to improve physical and mental health globally for people who required assistance to improve their mental health (mind and body). Through this process, appropriate access and pathways were integrated for physical and mental healthcare plans. Therefore, health help-seeking behaviour is considered a complex process involving awareness and appraisal of the physical and mental health problem. Help-seeking behaviour is the ability to express the problem and ask for support, relying on accessible and available sources of help, and a willingness to seek out informal and formal help by disclosing relevant information (Rickwood et al., 2005). As a result, one way to achieve good health in our contemporary society is through mHealth literacy. Health and mhealth literacy are associated with seeking help from appropriate treatment and professional services on-line (Wright et al., 2007). Research has demonstrated that public mental health interventions with a focus on mHealth literacy significantly improves help-seeking intentions (Griffiths et al., 2012; Rickwood et al., 2005).

EPMHI technology includes online apps, internet use, telehealth, and video conferencing as well as chat rooms, websites, Facebook and instant messaging. Population health and mhealth research reveals that most people, particularly students with mental health issues, often do not seek professional help, despite the existence of effective counselling (Becker et al., 2014; Harrison et al., 2011). Many research findings allude to EPMHI strategies that provide a model for self-monitoring (symptoms and behaviour), and personalized biofeedback, motivational support, and clinical mental health therapy guidance (Becker et al., 2014). More importantly, EPMHI may facilitate educational literacy and/or training for purposes of administering standardized assessments (Harrison et al., 2011).

In the last decade, EPMHI have become a catalyst for public mental health help-seeking behaviour. The internet, especially through Google search, has become the main source of online health help-seeking information, particularly for young men (Eysenbach et al., 2002; Rickwood et al., 2007). Online services throughout Canada include York University Help Web Page & APP; Bell Lets Chat, MoodFX from UBC, and Booster Buddy from Island Health. These online services include self-directed and low-intensity mental health instruments which are web-based mental health supports such as www.heretohelp.bc.ca (national online counseling services), mindyoungminds.ca (repositories for information and resources concerning mental health); www.youthinbc.com (structured self-directed online therapy); and mind Shift from Anxiety BC. As a result, online mhealth services may assist in the elements of social determinants of health.

Research validates that coordinated EPMHI online therapy and self-monitoring helps people progress towards mhealth results (Calear et al., 2009). Additionally, online mhealth websites have been shown to increase the use of services for adults, which is why EPMH electronic-based interventions are gaining empirical support (Christensen et al, 2010a, 2010b). The advent of apps has created new opportunities. Smartphones can keep the user connected to the Internet at all times. Smartphones and apps also provide computing facility comparable to personal computers and software, with the advantage of mobility (Free et al., 2013).

Public and mhealth self-help interventions are available in several formats with on-line feedback in Canada. Single episodes of EPMHI with person-to-person pattern guidance utilizes the brief-therapy format of self-help delivered over the Internet. During the interaction the student learner becomes mHealth literacy proficient, with discourse of the nature of information provided by the EPMHI. On the other hand, normative feedback enables the user to compare their own issues in the use of frequency, quantity, or other measures to the level of their own cohort or peer group (Tylee et al., 2007). A more extended form of mHealth self-help involves protocol-driven treatments grounded on principles of behavioural self-control and cognitive-behavioural therapy (Cohen et al., 2009). Further psychological motivational interviewing as well as behaviour modification principles integrate into therapy (Gulliver et al., 2010). It has been suggested that the recommended time of use of the extended self-help interventions is 6 weeks, especially for developmental issues and for anxiety, depression, alcohol and other mental health disorders (Christensen et al, 2010**)**.

Prior research shows that EPMHI interventions provided within the framework of

mobile cognitive-based therapy (Proudfoot et al., 2013a) facilitates affirmative outcomes for mental health issues including anxiety, stress, depression, alcohol and smoking cessation (Harrison et al., 2011). An Australian study reported that 88% of its survey respondents use websites or apps on their mobile phones and predicted that 92% of respondents would own a smartphone by October 2015 (Mackay, 2014). According to (Burns et al, 2010), smartphone usage by young people is high; the Australian Communications and Media Authority reported that in May 2013, 89% of people aged 18-24 years had a smartphone and 83% of this age group downloaded an app in the previous six months (Christensen et al, 2010a; 2010b).

Studies investigating the effectiveness of mHealth-self-help interventions in a neoliberal state among student and younger populations have been evaluated mostly in student settings in the United States and Australia, and more recently, in Europe (Christensen & Hickie, 2010a; 2010b). In a research study conducted by (Carey, et al, 2009) they found that EPMHI- computer-based interventions had a positive impact on student alcohol consumption as compared with no-intervention controls. The favourable impact was also shown in a recent systematic review on the effectiveness of online programs to address problem drinking among university students (White et al., 2010).

Students from all racial backgrounds especially men accept EMPHI as sources of health information (Burns et al., 2010; Christensen et al, 2010a, 2010b). Because of how they interface with technology during their childhoods, present-day racialized and non-racialized students are systematically integrated with EPMHI technologies (Mackay, 2014). In a recent survey, 39% of students and young people reported using the Internet to seek information

about a mental health problem (Mackay, 2014). EPMHI technologies may also offer a medium to improve the well-being of students' and young people by supporting the development of mindfulness (Burns et al., 2010; Christensen et al, 2010a, 2010b).

Seizing the potential of EPMHI at York University will lighten the way for a healthcare and mhealth paradigm shift. Our current research indicates that the utilization of EPMHI by York University racialized and non-racialized students were less successful due to the lack of operationalization of the social medium and apps technology by the York administration and the counselling centre. The data indicates only 10% of the students surveyed knew of the social medium instruments at York University.

In summary, to address structural barriers in physical, mhealth inequities and inequitable conditions, it is essential for university policy makers to have dialogue on inequities, especially as they relate to racialized students. Clearly, these dialogues must address the critical disability issues of both racialized and non-racialized students. These dialogues require effective political participation of all racialized and non-racialized students, including students with physical and mental health disabilities. Promoting both physical and mental health equity affects students living conditions, their daily practices, and behaviour-related risks. Addressing structural determinants of these inequity will empower non-racialized and racialized students.

Fortunately, EPMHI, including electronic mobile apps are emerging technologies to provide mental health literacy and engage help-seeking behaviour which may develop good health and lay the foundation of equity. Many researches published thus far, combined with

the potential of physical and mental health instruments such as the internet, and mobile apps for learning and personal growth, offer evidence to compel institutions such as government, communities, universities- like York and mental health professionals need to integrate these EPMHI technologies into education environments. Research on online delivery of physical and mental health services with features such as chat rooms, discussion boards, social networking and interactive games suggest that moderated support matters when delivering a service online information may further develop and create equity for racialized students without a voice in power. However, online public mhealth counselling and therapy has shortfalls including the absence of verbal and nonverbal cues, difficulties in maintaining confidentiality, professional standards, and guaranteeing therapy credibility (Brauser, 2012).

Limitations of the Results

The first limitation was that the data were collected from York University Students setting (York University/Keele campus) at one time. Consequently, the findings of this study may not have external validity, meaning that they cannot necessarily be generalized to all diverse racialized groups, as well as at all educational settings, at all times (Creswell, 2014; Fraenkel & Wallen, 2010).

The second limitation was that the sample of students used in this study were volunteers, and were not randomly selected from the target population. Further, the sizable portion of the participants derived from the Health Science school from York University. Because students who volunteer to participate in research may not be representative of the target population in all of its essential characteristics, the results may be limited by sampling

bias (Fraenkel & Wallen, 2010). Out of 570 students who responded to the survey, 491, 86.1% completed the items in the Attitudes Toward Seeking Professional Help Scale; Beliefs About Psychological Services Scale; Vancouver Index of Acculturation; Race-Related Events Scale; Centre for Epidemiological Studies Depression Scale, and Beck Anxiety Inventory, as well as reporting their racialized status and ethnic identity. The students who did not complete the instruments, and/or who did not report their racialized status (n = 79, 13.9%) were excluded. The reasons why these students did not complete the instruments are unknown, and if these students were included, then the results could potentially be different. It is possible that some students suffered from questionnaire fatigue, meaning that because the survey was long (148 items) many questions were skipped, and less time and effort was put into answering questions at the end of the survey compared to the start (Cape, 2005; Galesic & Bosnjak, 2009; Lavrakas, 2008).

The third limitation is that even after understanding the confidentiality assurance in the cover letter, some of the students may provide biased answers, or not answer some of the items honestly. There may be a high proportion of missing values. There is also the possibility of cultural response bias, referring to the peculiar cultural communication styles of many respondents, particularly of racialized groups, to provide consistently biased answer patterns to questionnaires concerning health and social issues (Minkov, 2010; Smith, 2004). Some respondents may consistently agree with all of the items (acquiescence response bias), or alternatively, they may consistently answer at the extreme end of each item scale (extremity response bias) irrespective of what they believe is the true answer. Missing values and response

bias may, therefore, limit the validity and reliability of the results of this study. Some of the instruments utilized in this research may not be in-link with the values and characteristics of the diverse racialized groups in this study. As a result, it is essential to create an open environment in order to redirect university policies based on equity mental health policies toward designing strategies that will help to improve psychological counseling and other social/religious and healthcare services for racialized students.

Recommendations for Future Research

Despite the limitations of this research, this is one of the few studies known to address the mental health problems and needs of the racialized student population at York University on Keele campus in Toronto, Canada. This section presents recommendations for future research to expand the findings of the current study. The quantitative data collected in this study could be utilized to conduct more complex multivariate statistical analysis, involving the use of structural equation modeling. For racialized students there are many social and mental determinants of health: age, gender/sex, income; social support; immigration policy, university policies, financial issues, education issues, physical environment, physical/mental health disabilities. As has been illustrated above, there is need for a new framework to assist with understanding the complexity of help-seeking behaviour for racialized students, especially one that can take into account larger structures of power.

Further as mention earlier, been a co-investigator in the "Strength in Unity Project," (Movember Foundation funded 2013-2018) that engaged racialized Asian men and youth (Chinese, South Asian, etc.) across Canada, demonstrated the value of anti-stigma intervention

that investigated across Canada (Livingston, Patel, Bryson, Hoong, Lal, Morrow, Guruge, 2018). In this study participants were randomized into several anti-stigma interventions-Acceptance Commitment Training (ACT), which may reduce internalized stigma and Contact-based Empowerment Education (CEE) which facilitates dialogue and collaborative learning to expediate knowledge building about mental health/illness and stigma reduction. It also encouraged participants to become future mental health ambassadors in their own communities to advance mental health help seeking. This study and the interventions used could be easily be integrated into a university environment to reduce stigma and create community among students. The study showed that racialized men and youth can break through many conventional divides, bondages and engage in meaningful and emotional dialogue about mental health.

Finally, qualitative research, based on the principles of intersectionality, may be beneficial to explore how counsellors, healthcare providers, psychologists, and other mental health professionals can, in the future, devise culturally adapted modalities that will help to reduce the symptoms of depression and anxiety among racialized students. Intersectionality values the lived experience of human beings especially racialized people (Morrow et al, 2007). The knowledge gained from intersectionality studies, involving the thematic analysis of narrative data collected by face-to-face interviews and/or focus groups between professionals, students, and researchers, may provide more insight and understanding than the analysis of quantitative data alone, regarding the root causes of the underutilization of services by racialized students. The integration of quantitative and qualitative data across several studies

may be translated into treatment modalities in practice based on a better understanding of the match between the students' socio-demographic characteristics (e.g., gender/sex, age, and racial/ethnic identity, as well as their baseline levels of stigmatization, acculturation, and attitudes towards seeking help.

Conclusion

A high proportion of the racialized students at York University, Keele campus who completed the survey reported that they suffered from mental disorders including depression, anxiety, and race related stress. The proportions of students suffering from depression at York University was higher in the racialized students compared to the non-racialized students. The mean scores for the Attitudes Toward Seeking Help were significantly lower in the racialized group of students than in the non-racialized group. A high level of stigma was a significant predictor of lower attitudes towards help seeking and lower intentions towards seeking mental health counseling amongst the racialized group. The stigma scores were higher among the man student population. The older students (age 26 to 65 years), in the racialized group tended to have higher scores for Attitudes Toward Seeking Help than the younger students (age 18 to 25 years). The mean scores for Attitudes Toward Seeking Help were significantly higher among the both racialized and non-racialized students who lived with their family, compared with the students who lived off or on campus. Previous diagnosis was a statistically significant predictor of Attitudes Toward Seeking Help. The racialized students did not appear to use more informal health seeking behaviour than the non-racialized students. Very few students used the counselling services or the online information system at York University to obtain information

on mental health issues. Therefore, equity-based EMPHI is further needed to be integrated with the counselling and help seeking behaviour at York University.

The theoretical implications were that the results of this study supported the Theory of Planned Behaviour, the Social and Cultural Determinants of Health and the Social Determinants of Health Theory. The practical implications of this study are that the findings serve to inform University governance, healthcare professionals, and counsellors that they need to improve their services in order to address the special needs of racialized students at York University and possibly other universities across Canada. Future quantitative and qualitative research should focus on how stigma is a significant mediator of the relationship between acculturation and the attitudes of the students towards seeking mental health treatment, and how this relationship should be translated into practice.

The integration of quantitative and qualitative data across several studies may be translated into practice by acceptance commitment training treatment modalities. This is based on a better understanding of the match between the students' socio-demographic characteristics (e.g., gender/sex, age, and racial/ethnic identity), as well as their baseline levels of stigmatization, acculturation, and attitudes towards seeking help. Notwithstanding the limitations of this exploratory study, this is one of the few studies known to address the mental health problems and needs of the Canadian racialized student population at York University Keele campus in Toronto, Canada.

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Appendix A
Invitation to Participate in Research

Study Name: How do the Attitudes and Beliefs towards Mental Health Help Seeking Behaviour differ between Racialized and Non-Racialized Students in Mental Health Help Seeking Behaviour at York University?

Researcher Name: Rodrick Lal PhD candidate

Institution: York University **Graduate Program:** Health

Purpose of the research:

This research explores mental health help-seeking behaviour among university students with a particular focus on racialized students. During a student's life span, university may create an environment of stress, anxiety and depression. For some students this may be the first time that they are away from their intergenerational families, friends and social networks. Research shows that students are vulnerable to mental health related problems such stress, anxiety and depression. Typically, racialized students seek informal supports to avoid stigma, shame and services that are culturally inappropriate. Students seeking help from the university counselling centre may encounter power relations, structural and social and cultural barriers. They might also encounter barriers related to the university environment and polices, lack of cultural safety, a dearth of mental health professionals, discrimination, immigration process, gender roles, stigma/shame, acculturation stress, the burdens of racism and gender conflict. Unfortunately, the dominant Canadian society and cultural norms may create barriers for mental health seeking help for racialized students.

What you will be asked to do in this study:

I am inviting you to take part in a research study about your attitudes toward seeking help from professionals (e.g., psychiatrists, psychologists, counsellors, and social workers) and other people to alleviate your personal-emotional problems. In the study you will be asked to complete an online survey. The survey will take approximately 35-40 minutes of your time. The survey can be completed at your convenience. By clicking on the link at the end of this form and answering all the questions, you are providing your informed consent to participate in this research study. The information in this study will be used to complete my PhD dissertation and for publications and presentations arising from the research.

Risks and Discomforts:

To the best of our knowledge, answering the questions has no more risk of harm than you would experience in everyday life. However, if at any time, you may feel distress or discomfort during the completion of the survey you can discontinue it at any time. Embedded in the survey is a list of mental health resources and personal counselling resources at York University and in the local community.

Benefits of the research and benefits to you:

There is no guarantee that you will get any benefit from taking part in this study. However, some people may feel that they are getting benefit by just being part of the study and contributing to research. Your willingness to take part in the research may, in the future, help us have a better understanding of the mental health help-seeking behaviour of students and their mental health needs at York University and other Universities across Canada

Voluntary participation and Withdrawal:

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering. If you decide not to take part in this study, your decision will have no effect on you at all. There are no costs associated with taking part in the study.

Confidentiality:

Your participation in the study is anonymous. That means that no one, not even members of the research team, will know that the information you give came from you. All information is digitally imputed. All information you provide during the research will be held in confidence. Your data will be safely digitally stored in a locked facility, on a secure home office computer that is protected by a unique password and is the sole property of the researcher. The protected data will be stored for the duration of the study, as well for 5 years period following the publication of the research results. All data will be destroyed by December 31, 2023. Confidentially will fully be provided possible by the law.

The data collected in this research may be utilized-in anonymized form by members of the research team in subsequent research investigations exploring similar lines of inquiry. Such projects will still undergo ethics review by the HPRC, our institutional REB. Any secondary use of this data guarantee anonymity as in the original research project.

Compensation:

There are no financial incentives for your participation**.**

Legal rights and signatures:

I_____, consent to participate in How do the Attitudes and Beliefs towards Mental Health Help Seeking Behaviour differ between Racialized and Non-Racialized Students in Mental Health Help Seeking Behaviour conducted by Rodrick Lal I have understand the nature of this project and wish to participate.

To give consent and answer the survey click on the following link:

www: survey monkey.com

Thank you for participating in the study.

This questionnaire is a vital part of your participation in the study.

Please read the question carefully. Please answer all of questions to the best of your ability

There are 8 parts to this questionnaire and will take less than one hour of your time.

All information is private, confidential and will assist current and future students of York University in regard to Good Mental Health.

Appendix B

SOCIO-DEMOGRAPHIC QUESTIONNAIRE

Please provide the following information. All information is private, confidential and will assist current and future students of York University in regard to Good Mental Health.

Record Gender:
Female__ Male_ _Other___
What is your age?
My Ethnicity/Racial background is:
What is your current marital status?
Single
Married or living common-law
Separated
Divorced
Widowed
Are you a…?
Canadian Citizen by birth Yes/No (IF YES PLEASE GO TO QUESTION 10)
Naturalized Canadian citizen___ Yes/No
Landed immigrant___ Yes/No
Other (specify):
In what year did you first immigrate to Canada?
How long have you been living in Canada?_____years
How long have you been living in Ontario?_____Years
Which country/city did you live in before migrating to Canada?
Mainland China, Hong Kong,
European Continent (i.e.-United Kingdom, France)
India Sub-Continent
West Indian (Jamaica, Trinidad etc.)
African Continent
Other (specify):

Do you usually think of yourself more as a?
Canadian
Chinese-Canadian;
South Asian Canadian
Caribbean Canadian
Eastern European Canadian
Other (specify):
What is your religion?
Buddhist
Catholic
Protestant
Taoist
Buddhist
Ancestor worship
Muslim
Other (specify):
How important is your religion to you?
Very unimportant
Somewhat unimportant
Moderate
Somewhat important
Very important
Not applicable
Is your culture important to you?
Very unimportant
Somewhat unimportant
Somewhat important
Very important
Don’t know
What is your parent’s highest education level?
No formal education
Elementary
Junior high
Senior high

Technical/professional college		
Community college		
University		
Graduate school		
Other (specify):		
How many years have you been educated in Canada?		
My current York student status is:		
Undergraduate: 1st year; 2nd year; 3 year; 4th year		
Graduate M.A. Student: 1st year; 2nd; 3 year		
PhD Student: 1st year; 2nd year; 3 year		
Other (please explain) _____		
Are you an International student?		
What is your personal average monthly income, including scholarship?		
a. Less than $500 b. $500-$999 c. $1000-$1499 d. $1500-$1999 e. $2000-$2499 f. $2500-$2999	g. h. i. j.	$3000- $3500- $4000 $20,000 Plus
My parental family income is		
Less than $15,000		
More than $25, 000		
More than $35, 000		
More than $50,000		
Above $75,000		
19. Where do you live currently?		
a. I live on campus		
b. I live with my family		
c. I live off Campus		
20 Has anyone in your family sought help from a mental health professional?		
a) yes		
b) no		
c) I do not know		

21. How has the York University CUPE strike affected your Mental Health?
a. created a great deal of stress
b. created anxiety
c. feeling low level on energy and depression
d. all of the above
e. none of the above
22. Have you ever used the Counselling Services at York University?
a. Yes
b. No
23. Have you used the On-Line Mental Health/APP information system at Yor University?
a. Yes
b. No
24. I have not used the Counselling Services at York University due to:
a. I was unaware of the counselling/mental/psychological services provided by York University
b. Due to the Hours of the Counselling Services Operation
c. The Counsellors will not be able to relate to my personal/emotional problems
d. I cannot relate to the counsellors/psychologists at York University to due to my cultural background
e. All of the above
f. None of the above
25. I identify with the following:

a) learning disability Yes/No
b) physical disability Yes/No
c) anxiety issues Yes/No
d) depression Yes/No
e) other(s) (please explain) _____-
f) I have good physical and mental health Yes/No

Appendix C

Attitudes Toward Seeking Professional Help (ATSPH, Fischer & Farina, 1995)

Your sex: _____ Male _____ Female
Your race/ethnicity: _____ African American
_____ Asian/Asian American
_____ White/European American
_____ Latino/a
_____ Arab/Middle Eastern
_____ Other: Please specify _____

Instructions

Read each statement carefully and indicate your degree of agreement using the scale below. In responding, please be completely candid.

0 = Disagree 1 = Partly disagree 2 = Partly agree 3 = Agree

_____ 1. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.

_____ 2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.

_____ 3. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.

_____ 4. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.

_____ 5. I would want to get psychological help if I were worried or upset for a long period of time.

_____ 6. I might want to have psychological counseling in the future.

_____ 7. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.

_____ 8. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.

_____ 9. A person should work out his or her own problems; getting psychological counseling would be a last resort.

_____ 10. Personal and emotional troubles, like many things, tend to work out by themselves.

Scoring

Reverse score items 2, 4, 8, 9, and 10, then add up the ratings to get a sum. Higher scores indicate more positive attitudes towards seeking professional help.

Appendix D

Beliefs About Psychological Services Scale (BAPS; Aegisdottir, S., & Gerstein, 2009)

Using the following 6-point scale, please check the circle that best represents your views on the following statements:

Strongly Disagree (1) (2) (3) (4) (5) (6) Strongly Agree

1. If a good friend asked my advice about a serious problem, I would recommend that he/she see a psychologist

(1) (2) (3) (4) (5) (6)

2. I would be willing to confide my intimate concerns to a psychologist.

(1) (2) (3) (4) (5) (6)

3. Seeing a psychologist is helpful when you are going through a difficult time in your life.

(1) (2) (3) (4) (5) (6)

4. At some future time, I might want to see a psychologist. (1) (2) (3) (4) (5) (6)

5. I would feel uneasy going to a psychologist because of what some people might think.

(1) (2) (3) (4) (5) (6)

6. If I believed I was having a serious problem; my first inclination would be to see a psychologist.

(1) (2) (3) (4) (5) (6)

7. Because of their training, psychologists can help you find solutions to your problem.

(1) (2) (3) (4) (5) (6)

8. Going to a psychologist means that I am a weak person.

(1) (2) (3) (4) (5) (6)

9. Psychologists are good to talk to because they do not blame you for the mistakes you have made.

(1) (2) (3) (4) (5) (6)

10. Having received help from a psychologist stigmatizes a person's life.

(1) (2) (3) (4) (5) (6)

11. There are certain problems that should not be discussed with a stranger such as a psychologist.

(1) (2) (3) (4) (5) (6)

12. I would see a psychologist if I was worried or upset for a long period of time.

(1) (2) (3) (4) (5) (6)

13. Psychologists make people feel that they cannot deal with their problems.

(1) (2) (3) (4) (5) (6)

14. It is good to talk to someone like a psychologist because everything you say is confidential.

(1) (2) (3) (4) (5) (6)

15. Talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.

(1) (2) (3) (4) (5) (6)

16. Psychologists provide valuable advice because of their knowledge about human behaviour.

(1) (2) (3) (4) (5) (6)

17. It is difficult to talk about personal issues with highly educated people such as psychologists.

(1) (2) (3) (4) (5) (6)

18. If I thought I needed psychological help; I would get this help no matter who knew I was receiving assistance.

(1) (2) (3) (4) (5) (6)

Appendix E

Vancouver Acculturation Index (VIA, Ryder et al., 2000)

Please answer each question as carefully as possible by circling *one* of the numbers to the right of each question to indicate your degree of agreement or disagreement.

Many of these questions will refer to your heritage culture, meaning the culture that has influenced you most (other than North American culture). It may be the culture of your birth, the culture in which you have been raised, or another culture that forms part of your background. If there are several such cultures, pick the one that has influenced you most (e.g. South Asian, Pakistani, East Indian, Punjabi, etc.). If you do not feel that you have been influenced by any other culture, please try to identify a culture that may have had an impact on previous generations of your family.

Please write your heritage culture in the space provided: _____

Use the following key to help guide your answers:

Strongly Disagree		Disagree		Neutral/ Depends		Agree		Strongly Agree
1	2	3	4	5	6	7	8	9

1. I often participate in my heritage cultural traditions	1	2	3	4	5	6	7	8	9
2. I often participate in mainstream North American cultural traditions	1	2	3	4	5	6	7	8	9
3. I would be willing to marry a person from my heritage culture	1	2	3	4	5	6	7	8	9
4. I would be willing to marry a North American person	1	2	3	4	5	6	7	8	9
5. I enjoy social activities with people from the same heritage culture as myself	1	2	3	4	5	6	7	8	9
6. I enjoy social activities with typical North American people	1	2	3	4	5	6	7	8	9
7. I am comfortable working with people of the same heritage culture as myself	1	2	3	4	5	6	7	8	9
8. I am comfortable working with typical North American people	1	2	3	4	5	6	7	8	9
9. I enjoy entertainment (e.g. movies, music) from my heritage culture	1	2	3	4	5	6	7	8	9
10. I enjoy North American entertainment (e.g. music, movies)	1	2	3	4	5	6	7	8	9
11. I often behave in ways that are typical of my heritage culture	1	2	3	4	5	6	7	8	9
12. I often behave in ways that are 'typically' North American	1	2	3	4	5	6	7	8	9

13. It is important for me to maintain or develop the practices of my heritage culture	1	2	3	4	5	6	7	8	9
14. It is important for me to maintain or develop North American cultural practices	1	2	3	4	5	6	7	8	9
15. I believe in the values of my heritage culture	1	2	3	4	5	6	7	8	9
16. I believe in mainstream North American values	1	2	3	4	5	6	7	8	9
17. I enjoy the jokes and humor of my heritage culture	1	2	3	4	5	6	7	8	9
18. I enjoy typical North American jokes and humor	1	2	3	4	5	6	7	8	9
19. I am interested in having friends from my heritage culture	1	2	3	4	5	6	7	8	9
20. I am interested in having North American friends	1	2	3	4	5	6	7	8	9

Appendix F

Race Related Events Scale (RES; Waelde et al., 2010)

Please circle "YES" if this has ever happened to you **because** of your race or ethnicity and "NO" if it has not:

1. Treated rudely or coldly because of my race or ethnicity Yes No

2. Ignored because of my race or ethnicity Yes No

3. Treated unfairly by teacher or boss because of my race or ethnicity Yes No

4. Insulted or called an insulting name because of my race or ethnicity Yes No

5. Told to leave a place and not come back because of my race or ethnicity Yes No

6. Followed by someone because of my race or ethnicity Yes No

7. Harassed by police or security guards because of my race or ethnicity Yes No

8. Verbal conflict with someone because of my race or ethnicity Yes No

9. Physical fight with someone because of my race or ethnicity Yes No

10. Someone hurt my family member because of his/her race or ethnicity Yes No

11. Someone threw something at me because of my race or ethnicity Yes No

12. Someone pushed or shoved me because of my race or ethnicity Yes No

13. Someone stole something from me because of my race or ethnicity Yes No

14. Someone chased me because of my race or ethnicity Yes No

15. Someone beat me or hurt me because of my race or ethnicity Yes No

16. Threatened with a knife, gun or other weapon because of my race or ethnicity Yes No

17. Someone threatened to kill me because of my race or ethnicity Yes No

18. Heard about someone (who is the same race or ethnicity as me) getting injured or killed because of their race or ethnicity Yes No

19. Saw someone (who is the same race or ethnicity as me) get treated in a racist or prejudiced way Yes No

20. Saw someone (who is the same race or ethnicity as me) almost get seriously injured or killed because of their race or ethnicity Yes No

21. Saw someone (who is the same race or ethnicity as me) seriously injured because of their race or ethnicity Yes No

22. Saw someone (who is the same race or ethnicity as me) get killed because of their race or ethnicity Yes No

Appendix G

Centre for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977)

Scale items:
Below is a list of some ways you may have felt or behaved. Please indicate how often you have felt this way during the last week by checking the appropriate space. Please only provide one answer to each question.

	During the past week:	*Rarely* or none of the time (less than 1 day)	*Some* or a *little* of the time (1-2 days)	*Occasionally* or a moderate amount of time (3-4 days)	*Most* or all of the time (5-7 days)
1.	I was bothered by things that usually don't bother me.				
2.	I did not feel like eating; my appetite was poor.				
3.	I felt that I could not shake off the blues even with help from my family or friends.				
4.	I felt I was just as good as other people.				
5.	I had trouble keeping my mind on what I was doing.				
6.	I felt depressed.				
7.	I felt that everything I did was an effort.				
8.	I felt hopeful about the future.				
9.	I thought my life had been a failure.				
10.	I felt fearful.				
11.	My sleep was restless.				
12.	I was happy.				
13.	I talked less than usual.				
14.	I felt lonely.				
15.	People were unfriendly.				
16.	I enjoyed life.				
17.	I had crying spells.				
18.	I felt sad.				
19.	I felt that people disliked me.				
20.	I could not get going.				

Scoring:	Rarely (Less than 1 day)	Some (1-2 days)	Occasionally (3-4 days)	Most (5-7 days)
Questions 4, 8, 12, and 16	3	2	1	0
All other questions	0	1	2	3

The score is the sum of the 20 questions. Possible range is 0-60. If more than four questions are missing answers, do not score the CES-D questionnaire. A score of 16 points or more is considered depressed.

Appendix H

General Help-Seeking Questionnaire (GHSQ; Deane, Wilson, & Ciarrochi, 2001)

Below is a list of people who you might seek help or advice from if you were experiencing a personal or emotional problem. Please circle the number that shows **how likely is it** that you would seek help from each of these people for a personal or emotional problem during the **next 4 weeks**?

1 = Extremely Unlikely 3 = Unlikely 5 = Likely 7 = Extremely Likely

Partner (e.g., boyfriend or girlfriend) 1 2 3 4 5 6 7
Friend (not related to you) 1 2 3 4 5 6 7
Parent 1 2 3 4 5 6 7
Other relative/family member 1 2 3 4 5 6 7
Mental health professional (e.g. psychologist, social worker, counselor) 1 2 3 4 5 6 7
Phone helpline 1 2 3 4 5 6 7
Doctor/GP 1 2 3 4 5 6 7
Professor/Academic Advisor 1, 2 3 4 5 6 7
Minister or religious leader (e.g., Priest, Rabbi, Imam, Chaplain) 1 2 3 4 5 6 7
Chat rooms 1 2 3 4 5 6 7 York chat room
I would not seek help from anyone 1 2 3 4 5 6 7
I would seek help from another not listed above 1 2 3 4 5 6 7

Appendix I

Beck Anxiety Inventory (BAI-II)

Beck, Epstein, Brown, & Steer (1988)

Instructions: Below is a list on common symptoms of anxiety. Please carefully read each item in the list. Rate how much you have been bothered by each symptom during the PAST WEEK, INCLUDING TODAY using the following scale, by **placing an "X"** which best corresponds to how you are feeling next to each symptom. Please only use the options listed below.

	0	**1**	**2**	**3**
	Not at all	Mildly, it did not bother me much	Moderately , it was very unpleasant, but I could stand it	Severely, I could barely stand it
1. Numbness or tingling.				
2. Feeling hot (*not due to heat*).				
3. Wobbliness in legs				
4. Unable to relax.				
5. Fear of the worst happening.				
6. Dizzy or lightheaded.				
7. Heart pounding or racing.				
8. Unsteady.				
9. Terrified.				
10. Nervous.				
11. Feelings of choking.				
12. Hands trembling.				
13. Shaky.				
14. Fear of losing control.				
15. Difficulty breathing.				
16. Fear of dying.				
17. Scared.				

18. Indigestion or discomfort in abdomen.				
19. Faint.				
20. Face Flushed.				
21. Sweating (*not due to heat*).				