# An Evaluation of an Online Mental Health Awareness Resource: Perspectives of Mindsight Certificate Holders

by

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Health Sciences

in

The Faculty of Health Sciences Graduate Study Program

University of Ontario Institute of Technology

June 2016

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**ABSTRACT** 

Rationale: Mental illness is a growing concern with stigma acting as a barrier for help-

seeking and accessing appropriate avenues of care. This study aimed to determine the

perceptions of the web-based resource Mindsight, which promotes mental health/illness

awareness.

**Methods:** A mixed methods research design was used to explore the perceptions of

Mindsight certificate holders. In Phase One, an Evaluation of Mindsight survey (n=90)

and the Attitudes to Mental Illness questionnaire (n=40) collected participant perceptions

of the Mindsight web resource and attitudes towards mental illness. In Phase Two,

participants (n=9) provided feedback on the Mindsight web resource during focus group

sessions.

**Results:** In Phase One, most participants considered the Mindsight web-based resource to

be applicable in their daily lives and indicated they had a greater understanding of mental

illness after completion of the resource. In Phase Two, all participants revealed that

Mindsight was easy to navigate; however, many thought the resource needed

improvements with respect to its cultural representation.

**Conclusion:** Mindsight was found to be useful by Mindsight certificate holders;

however, cultural representation needs to be improved.

Keywords: mental illness, web-based, cultural representation

#### ACKNOWLEDGEMENTS

I would like to express my gratitude to my research supervisor, Dr. Wendy

Stanyon for her time and effort with this study. Thank you for guiding me during my

research and thesis writing, which by no means was an easy task! Your expertise,

understanding, and patience was invaluable to my graduate experience. Through this

journey, I am proud to have worked with someone who was so passionate about mental

illness and perpetuating a stigma free world!

I would also like to extend my deepest appreciation for my thesis committee: Dr. Milly Ryan-Harshman and Dr. Robert Balogh. Your support, knowledge and insightfulness encouraged me throughout this process and helped me to understand and enrich my ideas. Through volunteering your time, you have helped me to develop a well-rounded thesis and I couldn't imagine working with two better individuals.

A special thank you to my family and friends for your love and encouragement of my education. To my family: Mom & Dad, I wholeheartedly recognize what you have sacrificed to get me where I am, and I am forever grateful. To my siblings, Amelia and Ashton; you both teach me so much and inspire me every day! Of course, my puppy, Prince, thank you for keeping me company while I spent endless hours night and day to study and write my thesis! To my friends, thank you for understanding why I couldn't come out every weekend! I hope I have created something that you can all be proud of!

Last but not least, a big thank you to every single one of my participants who, irrespective of busy lives and schedules, took the time to shed light on a topic very near and dear to me. Thank you for being so open and honest...your responses and willingness to discuss such a sensitive topic have been more helpful than you know...thank you!

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#### LIST OF ABBREIVATIONS

AMIQ Attitudes to Mental Illness Questionnaire

CAMH Centre for Addiction and Mental Health

CAMI Community Attitudes towards Mental Illness

CDT Cultural Dimension Theory

CFT Cognitive Flexibility Theory

CMHA Canadian Mental Health Association

CPA Canadian Psychological Association

ECA Epidemiologic Catchment Area

IP Internet Protocol

LGBT Lesbian, Gay, Bisexual, Transgender

MHCC Mental Health Commission of Canada

PTSD Post-Traumatic Stress Disorder

REB Research Ethic Board

SPSS Statistical Package for the Social Sciences

TAM Technology Acceptance Model

UOIT University of Ontario Institute of Technology

WHO World Health Organization

#### **Chapter 1: Introduction**

### 1.1. Background

People experiencing mental illness (including addiction and substance use) and other mental health challenges are among the most stigmatized, marginalized, disadvantaged and vulnerable members of our society (Overton & Medina, 2008). In societies where the prevalence of mental illness seems to compromise quality of life and economic prosperity, not only through direct costs of health and social services but also due to lost employment and productivity, the implementation of mental health promotion resources is imperative as they may become instrumental in addressing such issues (Tomaras et al., 2011). According to the World Health Organization (WHO), over 450 million people worldwide are affected by mental, neurological, or behavioural challenges at any one time, and approximately 50% of these individuals do not receive any professional help (Feng & Campbell, 2011). Prince et al. (2007) reported that there are five major contributors to the mental and neurological totals, which are unipolar depression (11.8%), alcohol-use disorder (3.3%), schizophrenia (2.8%), bipolar depression (2.4%), and dementia (1.6%). Further, the WHO (2011) reports that mental illnesses are estimated to contribute to 33.9% of the global burden of disease. Every day, half a million Canadians are absent from work due to mental illness challenges, which costs the Canadian economy \$33 billion in lost productivity (Mental Health Commission of Canada (MHCC), 2014). According to estimates in 2012 by the Canadian Mental Health Association (CMHA), mental illnesses resulted in a total cost of \$14.4 billion in

1998, a number that has only increased, placing mental illness amongst the most costly of all conditions in Canada.

Stigma can be a barrier to seeking early treatment; often people will not seek professional help until their symptoms have become serious (Parle, 2012). Others disengage from services or therapeutic interventions or stop taking medication, all of which can cause relapse and hinder recovery (Parle, 2012). Many people say it is harder to live with the stigma than the illness itself (MHCC, 2014). In making a decision to seek treatment, individuals may take into consideration several aspects of their life such as family, work, and social interactions. Each can play an integral role in an individual's decision to pursue treatment, and negative perceptions and reactions about mental health can prevent individuals from getting the help that they need. Currently, two-thirds of Canadian individuals with a mental health challenge will not seek help because of the stigma associated with their illness (MHCC, 2014). When negative and biased opinions are expressed within a particular social group, it is important to address such issues through the implementation of mental health promotion interventions at the level of community, so that many individuals and various other influential groups in the community may develop informed positive attitudes about mental illness (Ferentinos et al., 2011).

Canada is one of the most diverse countries in the world. Nearly 20% of the population was born in another country and hundreds of thousands of new immigrants arrive each year (MHCC, 2014). Current literature reports there are differences in mental health for populations from different ethnic backgrounds.

Ethnicity is an umbrella concept that embraces groups differentiated by colour, language, and religion; it covers tribes, races, nationalities, and castes (Ojeda & Bergstresser, 2008). Utilization of mental health services has been found to vary systematically by race-ethnicity and gender; for example, males and racial ethnic minorities receive less care than women and Non-Hispanic Whites (Ojeda & Bergstresser, 2008). The utilization of services and resources by populations that require treatment is suggested to vary greatly depending on the community. CMHA (2012) confirms numerous barriers to mental health services exist including stigma, poverty, lack of integration between mental health and health services, regional disparities, cross cultural diversity, and limited English language proficiency.

With nearly 8 in 10 Canadians using the Internet on an almost daily basis, there is potential for the Internet to be a prominent resource for individuals to access mental health information cost-efficiently (MHCC, 2014). E-mental health resources (e.g., psychoeducation, self-help tools, online counseling, etc.) possess several unique advantages over traditional therapies such as maintaining anonymity, improved accessibility in terms of overcoming geographic constraints, as well as the flexibility of accessing resources at any time (Feng & Campbell, 2011). However, in early 2013 an environmental scan was completed of existing e-mental health resources in Canada and the findings indicated that, although there are many e-mental health options available, there is no common framework in place to guide the content, format, or delivery of services (MHCC, 2014).

Although the Internet has significant potential to serve as a primary method of access for individuals looking for more mental health information, there is

limited and outdated research on the usefulness of Internet-based mental health resources. Also, there is evidence from surveys in several countries of deficiencies in (a) the public's knowledge of how to prevent mental illnesses, (b) recognition of when an illness is developing, (c) knowledge of help-seeking options and treatments available, (d) knowledge of effective self-help strategies, and (e) first aid skills to support others affected by mental illnesses (Jorm, 2011). Neal, Campbell, Williams, Liu, & Nussbaumer (2011) also noted in their e-mental health study that there is a significant knowledge gap regarding the existence of e-mental health formats. The Canadian Psychological Association (CPA) released a report in 2013 stressing a need for education and communication with consumers in regards to what constitutes best practices in mental health services and where to access these; therefore, there is an apparent need for a standard mental health web-based resource to help facilitate education and provide information relevant to mental health/illness. This type of education can help individuals in making informed choices about treatment and service.

#### 1.2. Research Problem

More individuals are turning to self-help tools in an effort to counteract stigma and provide the essential basic information about mental health (Neal et al., 2011). Further, Kauer, Mangan & Sanci (2014) indicate that help-seeking is an important first step in improving mental health and accessing appropriate avenues of care. Given that the current literature is limited in scope and mostly outdated, there is a need to determine the usefulness of current web-based resources and their applicability to varying population groups. With face-to-face support for mental

health being limited (Lederman, Wadley, Gleeson, Bendall, & Alvarez-Jimenez, 2014), implementation of another method to assist individuals to learn more about mental health and aspects of care is needed.

An online mental health resource has the potential to supplement existing face-to-face therapies, which can be expensive and time-consuming, by increasing education and help-seeking behaviours in individuals. Resources that also provide anonymity to their users are becoming a preferred approach since mental illness carries significant stigma. Individuals do not want to be identified as clients with a mental illness (Lederman et al., 2014). Urbanoski, Cairney, Bassani & Rush (2008) confirm that Canadian population surveys report between 35% and 50% of respondents who meet criteria for a mental or substance use illness do not seek services for care. Given that the percentage of unmet needs for individuals with a mental illness is high, alternative options that encourage care need to be explored. With the surge in Internet use, there is the potential for online mental health resources to become a primary method of communication and information. Adults with challenges associated with their mental health are particularly likely to use the Internet to access mental health information (Gowen, 2013). Christensen, Leach, Barney, Mackinnon & Griffiths (2006) noted that future research will need to consider the various effects that web-based self-help has on individuals.

#### 1.3. Purpose of the Study

The purpose of this study was to provide an evaluation of an e-learning mental health awareness module, Mindsight, developed by University of Ontario Institute of Technology faculty member, Dr. Wendy Stanyon, from the perspectives of Mindsight

certificate holders. Mindsight is intended to facilitate a greater understanding of basic strategies and resources to support individuals experiencing mental illness and consists of nine sectioned tabs, each pertaining to a different mental illness and a tenth section about stigma (Mindsight, 2010). The usefulness, applicability, and cultural sensitivity of Mindsight were measured through this study. With stigma and a lack of education being barriers for accessing mental health care, it is important to explore the characteristics of an e-learning module that could assist in decreasing stigma and increasing mental health awareness.

## 1.4. Research Questions

- 1. Do individuals who have completed Mindsight hold positive views and attitudes towards people with a mental illness?
  - a. Do individuals who have completed Mindsight and self-identify with an ethnic group Other than Canadian share similar and/or different positive views and attitudes towards people with a mental illness when compared to individuals who have completed Mindsight and selfidentify as Canadian?
- 2. What are Mindsight certificate holders' perceptions of Mindsight as an online mental health/illness awareness resource?
  - a. Are individuals who have completed Mindsight applying what they have learned in their daily life?
  - b. What is the ease of use (i.e. ease of navigation; organization, and clarity of content) of Mindsight from the perceptions and experiences of the individuals who have completed the resource?

- 3. Do individuals who have completed Mindsight and self-identify with an ethnic group Other than Canadian, share similar and/or different perceptions of Mindsight as a mental health/illness awareness resource when compared with individuals who have completed Mindsight and self-identify as Canadian?
  The researcher hypothesized that:
  - Individuals who have completed Mindsight hold positive views and attitudes towards individuals with a mental illness.
    - a. There are no differences in positive views and attitudes between individuals who have completed Mindsight and self-identify with an ethnic group Other than Canadian when compared to individuals who have completed Mindsight and self-identify as Canadian.
  - 2. Individuals' perceptions of Mindsight as an online mental health/illness awareness resource are positive.
    - a. Individuals who have completed Mindsight apply what they have learned in their daily life.
    - b. Individuals who have completed Mindsight perceive the resource to be useable (i.e. ease of navigation; organization, and clarity of content).
  - 3. Individuals who have completed Mindsight and self-identify with an ethnic group Other than Canadian share similar perceptions of Mindsight as a mental health/illness awareness resource when compared with individuals who have completed Mindsight and self-identify as Canadian.

## 1.5. Significance of Study

This study will contribute to the literature by exploring individuals'

perceptions of a web-based mental health/illness resource. Mental health/illness is increasingly becoming a public health issue that needs to be addressed. Results from a Canadian survey indicate the prevalence of unmet needs for those with a concurrent mental illness is 51% (Urbanoski et al., 2008). Results from this study also conclude that more than one in five Canadians who met criteria for a mental illness or substance use disorder that lasted at least 12 months, perceived an unmet need for care (Urbanoski et al., 2008). The WHO (2014) reports that all over the world the gap between the need for treatment and its provision is wide, with between 76% and 85% of people with mental illnesses in low-and-middle-income countries receiving no treatment for their illness. In high-income countries between 35% and 50% of people with mental illnesses are in similar situations with no treatment (WHO, 2014). In addition, the literature suggests that ethnic minority groups are disadvantaged within current health care services. Newcomers represent two-thirds of the population growth in Canada over the past decade, and it is projected that by 2031, 78% of persons living in Toronto will be immigrants or Canadian-born children of immigrants (Zerger, 2014). With this pending growth not having been identified until recently, diversity is not adequately represented in existing mental health literature. More cross-cultural research is needed to reflect the high diversity rates within mental illness. Understanding these unmet social and health needs can assist service providers in developing culturally sensitive and responsive care pathways (Bruce, Gwaspari, Cobb, & Ndegwa, 2012).

Health care and patient needs are constantly evolving and there should be services and communication tools available to meet these needs. Individuals are

actively seeking mental health resources, yet there remains limited research on how best to provide the tools and resources individuals require. With the Internet becoming an increasingly popular source of easily accessible information, there is an opportunity, through web-based resources, to empower individuals, families, and communities. This can be done by increasing awareness of mental illnesses, self-help strategies, treatment options, and available supports, which will hopefully decrease stigma and may assist individuals in seeking treatment. This study is significant because educating a variety of individuals is the first step in reducing stigma which the literature suggests is a significant barrier to accessing appropriate health care. There is also an opportunity to promote healthy living by demonstrating that mental health issues warrant as much attention as physical health issues.

Currently, the literature is limited when identifying the relationship between mental health education and the Internet. A standard web-based resource is recommended to educate populations, however such a tool has not yet been considered to have filled this void. Further, much of the existing literature consists of research studies that have not included samples with culturally reflective populations; or have not focused on diversity issues at all (Allmark, 2004). This lack of diversity limits the generalizability of the research. This study attempted to address the limitations of the current literature, as well as provide valuable information that may be used to modify Mindsight.

# **Chapter 2: Literature Review**

#### 2.1. Mental Health

## 2.1.1. Background.

The literature demonstrates that there is a growing need to devote attention and resources to the area of mental health. Many Canadians experience a need for mental health care, but not all those needs are met (Sunderland & Findlay, 2013). Mental health has been neglected for far too long in Canada, and the need for immediate action is broadly recognized across the mental health sector—by people living with mental health challenges, their family members and caregivers, professionals, researchers and governments (Sunderland & Findlay, 2013). In 2012, an estimated 10% of Canadians experienced a mental illness (depression, bipolar disorder, generalized anxiety disorder, or alcohol, cannabis or substance use or dependence) (Sunderland & Findlay, 2013).

In any given year, one in five Canadians is living with a mental health or addiction challenge and about 20% of people with a mental illness have a co-occurring substance use disorder (Centre for Addiction and Mental Health (CAMH), 2012). Further, results from an ongoing survey conducted by CAMH show that 2.2% - over 230,000 Ontario adults, seriously contemplated suicide in 2013 (CAMH, 2014). Rates of alcohol consumption were also high, with daily drinking (at least one drink per day) among those who had consumed alcohol in the past year, increasing from 5% in 2002 to 8.5% in 2013 (CAMH, 2014). A new online poll of 2,204 Canadian adults, showed that an alarmingly high number of Canadians think that the term 'mental illness' is used as an excuse for bad behavior.

As well, a majority of Canadians would not visit a family doctor or hire a lawyer who has mental illness; more than half of the survey respondents would not marry someone who has a mental illness, and a large proportion are fearful of being around people with mental illness (Spurgeon, 2008). Gruhl (2009) found that people with mental illnesses are paid less and are less likely to hold full time positions or be promoted. Lim et al. (2008) indicate that the indirect costs of short-term and long-term productivity losses and early death associated with depression and distress is about \$14.4 billion in Canada. Lim et al. (2008) further constructed a comprehensive measure of the incremental economic impact of persons with mental illness aged 20 and above in Canada to be \$51 billion, a number that has more than likely increased since the study was published; however, current estimates of the economic impact of mental illness in Canada are not well documented in the literature.

In a study conducted by Romans, Cohen, & Forte (2011), prevalence rates of depression and anxiety were compared in urban and rural Canada using data collected from a 2002 Canadian Community Health Survey. Results indicated that participants in the urban core had higher rates of depression in the previous 12 months compared to those in rural areas (Romans et al., 2011). Additionally, it was found that those residing in urban areas were significantly more likely to report some use of mental health services in the previous 12 months (Romans et al., 2011). Romans et al. (2011) also found that both country of birth and ethnicity remained important, with Canadian-born and white respondents having higher depression rates. However, this study had limitations that may have impacted the

results. The rural population studies mainly consisted of educated individuals of diverse ethnicity, who had good incomes, owned their own home, were more often married, and had good physical health (Romans et al., 2011). Therefore, by including a population sample that was relatively satisfied with life, results were expectedly skewed. Thus, recommendations by the authors included further research in this area, accounting for various populations as well as including individuals with psychoses, instead of just depression and anxiety.

Sunderland & Findlay (2013) described the prevalence of four types of mental health care needs (information, medication, counseling, and other) based on data from the 2012 Canadian Community Health Survey—Mental Health. According to the results of this study, 17% of Canadians aged 15 or older reported having a need for mental health care in the previous 12 months (Sunderland & Findlay, 2013). Further surprising was the estimated 600,000 Canadians who reported that in the previous 12 months, they had an unmet mental health care need (therapy or prescription), and more than one million Canadians had a partially met mental health care need (Sunderland & Findlay, 2013). Thoresen, Jense, Wentzel-Larsen, and Dyb (2014) reported that respondents from their study refrained from seeking help or support for their mental illness because they thought (a) people were tired of hearing about it, (b) other people had enough dealing with their own problems, (c) people would think they were too caught up with it, (d) they would be burdening their family and friends, and (e) people would not understand. Ultimately, personal circumstances, more specifically, a lack of social support from friends and family, can be a significant barrier for individuals seeking help for their

mental illness. However, the literature is consistent in calling for further research to be conducted in order to account for individuals who perceive a need and individuals who do not perceive a need. Additionally, distinguishing between ethnicities could yield data that can be generalized across populations.

#### 2.1.2. Diversity in mental health.

Canada is one of the most diverse countries in the world. Nearly 20% of the population was born in another country and hundreds of thousands of new immigrants arrive each year (Hansson, Tuck, Lurie, & McKenzie, 2012). The literature demonstrates a prevalence of mental health challenges in all types of communities, however, most notably in immigrant communities, where extreme hardship and experiences play an integral role in the onset of symptoms. Some studies indicate that the prevalence of mental health challenges among refugee children and young people varies extensively from 3-94% for post-traumatic stress disorder (PTSD), 4-47% for depression and from 3-96% for anxiety (Cross & Singh, 2012). Epidemiological studies have documented high levels of mental health challenges in many Canadian Aboriginal communities (Kirmayer, Brass & Tait, 2000). Most estimates of the prevalence of psychiatric disorders are based on service utilization records; however, many Aboriginal people never come for treatment; service utilization is at best only a low estimate of the true prevalence of distress in the community (Kirmayer et al., 2000). Kirmayer et al. (2000) further report that only a few epidemiological studies of psychiatric prevalence rates among North American Indigenous people have been published—two of these in Canadian populations. Therefore the lack of research in this area perpetuates the

problem because little research addresses or proposes solutions to tackle the reluctance of Indigenous populations to seek treatment for mental health related issues.

Race and ethnicity have been identified as correlates of attitudes, perceptions, and behaviours related to seeking mental health care (Alvidrez, 1999; Ojeda & Mcguire 2006). Cross and Singh (2012) were able to report that more than 20% of people in Australia are from culturally and linguistically diverse backgrounds, speaking more than 200 languages and bringing with them attitudes, values and beliefs surrounding health, illness and mental health issues that are not fully consistent or compatible with Western approaches to health care. This indicates the degree of diversity that exists in populations similar in size to Australia, such as Canada.

The literature suggests that the utilization of services and resources by populations that require treatment also varies greatly depending on the community. Further, the majority of people from different ethnic backgrounds hold negative or stigmatizing beliefs about mental health issues and display a lack of understanding with regards to the biomedical causes of mental illnesses (Al-Krenawi, Graham, Al-Bedah, Kadri, & Sehwail, 2009; Bogner, Dobransky, Wittink, 2008; Donnelly, 2005; Jorm et al., 2005; Kurihara, Kato, Reverger, & Gusti, 2006; Ward, Clark, & Heidrich, 2009; Zafar et al., 2008). Ojeda and Bergstresser (2008) also found that 25% of their sample population that was white reported stigma avoidance as a main reason for not seeking treatment for a mental illness as well as a further 9.72% reporting mistrust or fear of the system. An additional 23.97% of African

Americans and 8.49% of Latinos reported negative attitudes toward treatment (Ojeda & Bergstresser, 2008). In addition, Cross and Singh (2012) reported Asian clients with schizophrenia were sheltered within the family and community—they did not utilize the system until three years after the initial onset of their psychotic symptoms. Communities may keep their loved ones with mental illnesses from being exposed to the rest of the family/community in order to avoid the stigma associated with the disorder. For this reason, amongst others, well planned services need to be offered by culturally sensitive people and the service itself must take into account those cultural norms, which will make it viable (Cross & Singh, 2012).

Bogner et al. (2008) conducted a study in which over 2,560 primary care patients participated in a questionnaire analyzing the association between ethnicity and perceived need for treatment. Results concluded that patient ethnicity may play a role in a family member's or a friend's perceived need for depression treatment of older adults who present in the primary care setting (Bogner et al., 2008). Caldwell-Colbert (2003) suggest that acknowledging and being responsive to the role of race and culture in clinical environments is vital to reducing disparities in mental health delivery and can make the critical difference in ensuring that ethnic minorities use the services and receive appropriate interventions.

Racial and ethnic inequality and discrimination are barriers to maintaining the mental health of Canadian immigrants (Reitmanova & Gustafson, 2009).

Reitmanova and Gustafson (2009) identified several reasons that immigrants in Canada underutilize the mental health services available; these reasons include having different understandings of mental health, mental illness and its treatment;

experiencing difficulty accessing relevant mental health information; and facing financial and organizational barriers as well as communication barriers in accessing appropriate mental health services (Reitmanova & Gustafson, 2009). Therefore, services that can accommodate varying ethnicities could enable individuals to feel more comfortable seeking mental health care.

A national study conducted by the California Black Women's Health Project revealed that 60% of African American women experience symptoms of depression (Ward et al., 2009). However, the use of outpatient mental health services is lower for African American women compared to White women and African men (Breslau, Kendler, Su, Gaxiola-Aguilar & Kessler, 2005; Mays, Caldwell & Jackson, 1996; .U.S. Department of Health Services, 2001). Another study examined treatment seeking among adult African American women with panic disorders, and found that only 13% sought treatment (Neal-Barnett & Crowther, 2000).

Population studies found that the mental health of immigrants tends to be better than that of the general population in both the sending and receiving countries (Guzder et al., 2011). Guzder et al. (2011) attributed this finding to the 'healthy immigrant effect' which reflects the fact that immigrants must pass through a variety of screenings to achieve immigrant status. Admission to Canada and the United States is neither random nor easy and as a result of selective immigration, many immigrant households consist of well-educated, occupationally skilled, healthy people (Beiser, Hou, Hyman, & Tousignant, 2002). However, the health of the immigrants tends to worsen over time to match that of the general

population (Guzder et al., 2011). Also, immigrants are less likely than their Canadian-born counterparts to seek out or be referred to mental health services, even when they experience comparable levels of distress (Kirmayer et al., 2011). Still, the existing literature does not accurately reflect the diversity in mental health, as many of these studies are the first of their kind. Further research in the area of immigrant health in Canada could detail causes of deteriorating mental health and methods to address these concerns.

#### 2.1.3. Stigma.

Other than perhaps tuberculosis or leprosy, few conditions in the history of medicine have conveyed such a negative social identity as a mental illness (Arboleda-Flórez & Stuart, 2012). Stigma is often used colloquially to refer to the negative and prejudicial attitudes held by members of the public toward people with a mental illness, or the stigmatized attributes, such as the mental illness label (Arboleda-Flórez & Stuart, 2012). Corrigan (2004) distinguishes two types of stigma: public stigma (what a naïve public does to the stigmatized group when they endorse the prejudice about that group) and self-stigma (what members of a stigmatized group may do to themselves if they internalize the public stigma). Living in a culture steeped in stigmatizing images, persons with mental illness may accept these notions and experience diminished self-esteem, self-efficacy, and confidence in one's future (Corrigan, 1998; Holmes & River, 1998; Corrigan, 2004).

Although studies show how help-seeking attitudes are influenced by demographic and psychological variables, insights into particular ethno racial

communities remain scant and little cross-national data exists (Al-Krenawi et al., 2009). In a large community sample, researchers found a link between perceptions of family members who did not approve if an individual sought mental health treatment, and help seeking attitudes (Leaf, Bruce, & Tischler, 1987; Bogner et al., 2008). Further, studies have shown that families play an important role in help seeking for minorities (Bogner et al., 2008; Lin, Inui, Kleinman, & Womack, 1982; Rogler & Crotes, 1993; Shin 2002).

Among Korean families, mental illness is known as a crazy or divine disease treated using traditional methods (Donnelly, 2005). In places such as India and Morocco, psychiatric disorders are attributed to supernatural phenomena, drug use, stressful life events, and personality deficiencies (Zafar et al., 2008). In Indonesia, it is firmly believed, especially among the older, less educated population, that individuals have schizophrenia due to supernatural factors such as God's will or witchcraft (Kurihara et al., 2006). Only 50% of Canadians would tell friends or coworkers that they have a family member with a mental illness, compared to 72% who would discuss a diagnosis of cancer and 68% who would talk about a family member having diabetes (CAMH, 2012). Tabassum, Macaskill, & Ahmad (2000) found that although Pakistani women in the United Kingdom (UK) would interact with individuals experiencing mental illness, none of their sample would consider marriage, less than a quarter would consider a close relationship, and less than half would be prepared to socialize. There was also marked reluctance to allow children to speak to anyone with a mental illness (Tabussum et al., 2000). With such views dominant in some societies, it is clear why individuals often feel uncomfortable

acknowledging a mental illness. In fact, the literature suggests that because of these societal views, people will conceal their issues to avoid being negatively labelled.

The Epidemiologic Catchment Area (ECA) program of research was initiated in collaboration between the National Institute for Mental Health and five American universities for the purpose of collecting data on the prevalence and incidence of mental illnesses and on the need for and use of services by those with a mental illness (Corrigan, 2004). Results of the Yale component of the ECA data showed that respondents with psychiatric diagnoses were more likely to avoid services if they believed family members would have a negative reaction to these services, that is, if they learned from their families that being identified as mentally ill disgraced themselves and/or their families (Corrigan, 2004). Corrigan (2004) further noted that families frequently reported an intense sense of shame as a result of a member's mental illness. Conversely, positive attitudes of family members were associated with greater service use in a sample of more than 1,000 drawn from a representative community sample and a group from a mental health clinic (Greenley, Mechanic, & Cleary, 1987; Corrigan, 2004). Corrigan (2004) also referenced various statistics of people who do not seek treatment in mental health. For example, further research of the ECA study showed that less than 30% of people with psychiatric disorders seek treatment and results from a subsequent large-scale study, the National Comorbidity Survey, which found that less than 40% of respondents with mental illness in the past year received consistent treatment (Corrigan, 2004). An American national survey conducted by the Substance Abuse and Mental Health Services Administration found similar

sobering results; fewer than 10% of people with psychiatric disabilities receive diagnostically indicated services such as vocation rehabilitation, case management, or day treatment (Corrigan, 2004).

Additionally, Corrigan (2004) found that there is a significant relationship between mental illness and the criminal justice system. Criminalizing mental illness occurs when police, rather than the mental health system, respond to mental health crises, thereby contributing to the increasing prevalence of people with serious mental illness in correctional facilities (Corrigan, 2004). Corrigan (2004) also reported that people with mental illness tend to spend more time incarcerated than those without mental illness. Ward et al. (2009) also found that African American women with mental illness are incarcerated at extremely high rates. Clearly, being stigmatized as mentally ill can have damaging repercussions for an individual.

A study by Donnelly (2005) examined the mental health beliefs of Korean parents, and determined that Korean parents demonstrate difficulty in utilizing the mental health system as they experience strong feelings of family shame and social stigma associated with mental illness. Shin (2004) maintained that part of the resistance to seek treatment stems from their unique ideas about mental illness and unfamiliarity with Western treatment methods. The Asian family system exerts great pressure to hide a family member's mental illness (Sue, 1994). In Asian society, mental illness tends to reduce the individual's social worth, engenders shame and makes it difficult to have a marital arrangement (Fabrega, 2001). Results of Donnelly's (2005) study concluded that Korean families' feelings of family shame, social stigma, and cultural beliefs of mental illness greatly influenced their

help seeking attitudes and resulted in a delay in receiving Western treatments. The stigma associated with mental health/illness is thus a prominent barrier for treatment and help seeking behaviors.

### 2.1.4. Impact of awareness on mental health.

The literature suggests there are three approaches that may diminish aspects of the public stigma experienced by people with mental illness: protest, education, and contact (Corrigan, 2004). Education is the aspect most focused on within the literature. Pinfold et al. (2005) conducted a study on the effectiveness of school-based interventions with young people aged 14-16 aimed at increasing mental health literacy and challenging negative stereotypes associated with severe mental illness. Conducted in sites in Canada and the UK, the research involved short educational sessions being delivered by a facilitator with direct experience of mental illness. Results of the study demonstrated that short educational workshops can produce positive change in young people's views of mental illness. Eisenberg et al. (2009) established that personal attitudes about mental health are shaped by public attitudes.

Pinfold et al. (2005) explain that children and young adults are the next generation of mental health consumers and providing young people with basic knowledge and skills for protecting mental health and an understanding of mental health challenges is seen as increasingly important in light of the research showing that the prognosis for severe mental illness is improved through early identification and intervention. Mental health promotion in schools provides opportunities to build positive responses to emerging emotional and behavioural issues and

promotes social and learning environments that are supportive to emotional wellbeing and collective growth (Pinfold et al., 2005). Also, as future members of the workforce, young people have the power to sustain and perpetuate stigma and discrimination, or eliminate it. Therefore young people are an attractive audience for attitude-change programs seeking to influence young minds before unhealthy attitudes and beliefs towards mental illness become embedded. Vogel et al. (2009) also found that the quality of the parent-child relationship is a factor in whether or not the child adopts the parent's or public's attitudes about mental health. However, Pinfold et al.'s (2005) Canadian findings cannot be generalized because the workshops that were conducted in Canada only focused on schizophrenia. Results from the UK portion of the study are more relevant as the workshops targeted general mental health issues. The literature suggests that education provides information so that the public can make more informed decisions about areas of mental health and thus far the educational response is positive. The Internet may be a suitable educational strategy to reduce the stigma associated with mental illnesses.

#### 2.2. The Internet and Mental Health

#### 2.2.1. Background.

The anonymity of the Internet allows users to seek information in private and to research sensitive health and mental health topics which they might not be comfortable discussing with others; both teens and adults cite this as a positive feature of online health searches (Morahan-Martin, 2000). In recent years, the Internet has become the fastest and most accessed source of information. The

literature suggests that it is the ease of access and anonymity that makes the Internet such a popular tool. In terms of health, online health information is used to fill an information void which can enhance coping and self-efficacy; in addition, it affects health related decisions and behaviour of users, their friends and family, and is often discussed with health care providers (Morahan-Martin, 2000). Recent studies have found that certain mental health information websites have improved mental health literacy (Oh, Jorm, & Wright, 2009). Despite the many advantages of such interventions, clinicians are still hesitant about recommending websites to patients; these reservations may be due to the reported poor quality of many mental health websites (Oh et al., 2009). As such, a standard web-based tool is recommended to educate users on mental health while providing resources and links to further self-help methods.

Both the lack of knowledge about help-seeking options and the stigma associated with mental illness, prevent individuals from seeking help or receiving information about their illness (Oh et al., 2009). However, many individuals and their relatives may use the Internet as a first step to obtaining information or even to initiate contact with a physician (Morahan-Martin, 2000). Although Morahan-Martin (2000) found positive results associated with Internet use, the author recommended developing a standard to specifically promote health and mental health sites, as a way to relay information concisely.

Beaton and Davies (2011) developed a novel web-based professional development resource called 'Mental health professional online development'. This resource was designed to support the implementation of the Australian national

practice standards for the mental health workforce and was expected to be useful to nurses working in mental health, or with patients who are experiencing mental illness. Results of the study concluded that 90% of participants reported increased knowledge of mental illness after interacting with the resource (Beaton & Davies, 2011). The results also indicated that users were applying what they had learned from online resources. Although this study's findings were significant, there is still very little literature available on the length of time participants continue to use the information after they have accessed an online resource.

# 2.2.2. E-learning.

As the literature suggests, e-learning (also referred to as learning online) has become an increasingly popular way for individuals to acquire knowledge. The key benefit of e-learning is the flexibility that it provides. Traditional teaching methods are labour intensive, being based mainly on role-playing in small groups with feedback and coaching from experienced trainers (Gega, Norman & Marks, 2007). In a study conducted by Schneider, Foroushani, Grime, and Thornicroft (2014), users' views of online approaches to self-help for depression were measured by questionnaires using a computerized cognitive behavioural therapy called MoodGYM and compared against five informational websites on mental health. Results indicated that 60% of the participants considered online therapy to be at least as acceptable as seeing a professional about mental health issues, and they were more likely to maintain this opinion over time if they used the interactive program, MoodGYM, rather than the informational websites alone (Schneider et al., 2014). However the study used self-selected sampling and therefore, the results

may not be generalizable beyond the sampled respondents.

In a randomized controlled study conducted by Jorm, Kitchener, Fischer, and Cvetkovski (2010), a mental health first aid training course was offered to the Australian public through e-learning in order to teach individuals how to provide initial help to a person developing a mental health illness or in a mental health crisis. Results indicated that e-learning was successful in increasing recognition of schizophrenia, promoting positive beliefs about depression treatment, reducing personal stigma regarding both depression and schizophrenia, and increasing confidence in providing help to someone with a mental illness (Jorm et al., 2010). Jorm et al. (2010) also found that the e-learning option was better suited than manual options, such as informational pamphlets, in reducing stigma towards a person with schizophrenia. Jorm et al. (2010) argued that this was most likely due to the short videos that were provided of people with mental illnesses talking about their experiences. Previous research has suggested that personal contact is an effective way to reduce stigma and although in the e-learning version, the contact was via video rather than in person, it may have had a similar effect (Jorm et al., 2010). An important limitation in this study was the high level of education and mental health literacy of the participants prior to the e-learning. Therefore, the possible gains from the education were limited and the generalizability of the findings to other groups is unknown.

Gega et al. (2007) tested whether student nurses learned better by computeraided self-instruction or face-to-face teaching about exposure therapy for phobia/panic. Results of this study supported the study's main hypothesis that computer-aided instruction would improve knowledge, skills, and satisfaction as much as a lecture-discussion would (Gega et al., 2007). This study also used participants whose first language was not English, which can attune to the diversification and thereby possible generalizability of the sample population. The authors further acknowledged that the diversity of the group suggests the approach could facilitate the development of international standards of teaching content and methods for health-care students in different countries (Gega et al., 2007). An important limitation of this study, however, was that the case scenarios used in teaching were not fully validated measures of knowledge acquisition and skills application. Study results could then be different if measures were fully validated for future research, indicating a need for further research in this area.

#### 2.2.3. Online mental health resources.

E-learning has been applied to both medical education and psychological treatments and can produce effects comparable to instructor-delivered education or face-to-face therapy (Jorm et al., 2010). In recent years, the Internet has become more than a simple communication tool, and increasing numbers of users resort to websites for information on health and related problems (Oh et al., 2009). Oh et al. (2009) further indicated that a multitude of resources exist, ranging from basic information on mental health and psycho-education to self-help therapy and e-counseling. Griffiths and Christensen's (2007) study of the potential utility of Internet-based depression information and automated therapy programs in rural regions, found Internet-based applications to be effective in reducing depressive symptoms and stigmatizing attitudes towards depression and in improving

depression literacy. As many as 80% of Internet users in developed countries use the Internet to search for health information, typically to find information on conditions, symptoms, diseases and treatments (Reavley & Jorm, 2011). Reavley and Jorm (2011) reviewed 31 articles that assessed the quality of websites providing information about mental illness such as affective disorders, anxiety disorders, eating disorders, substance use disorders and schizophrenia/psychosis. Through reviewing the 31 articles, Reavley and Jorm (2011) found that it may be reasonable to conclude that there has been an improvement in information quality over time. Qualities such as design features, readability, simplicity and absence of bias were also key factors in a consumer's willingness to consult a web-based resource for mental health information. Reavley and Jorm (2011) identified a need for further research about consumers of mental health information on the Internet, in addition to factors uniquely relevant to the Internet such as privacy, usability and accessibility.

Oh et al. (2009) conducted a mixed methods study that compared young people's preference for either a website with self-help books or two face-to-face services—counseling and mental health resources. Results indicated that using counseling and a website was seen as likely to be helpful for depression, substance use, and social phobia (Oh et al., 2009). From the results of this study, Oh et al. (2009) concluded that while young people would prefer counseling as a direct method of help, using the Internet to access mental health information was rated as likely to be helpful by approximately 70% of respondents. Despite this study showing a positive correlation between online mental health and self-help, this

study had several limitations. Responses were based on hypothetical situations and ratings of perceived helpfulness rather than behavioural intentions (Oh et al., 2009). Therefore, results may not reflect actual behavior if participants went on to develop a mental illness. Further, the targeted population in this sample was young adults ranging from 12-25 years. As such, the findings from this study may not be generalizable across other age groups.

# 2.2.4. Learning style differences.

Learning depends on many factors in addition to aptitude including, but not limited to, motivation, instructional methods, environments, background, study strategies, and learning styles (Berry & Settle, 2011). Individuals use different learning styles and the choice of style is influenced by external factors. Heffernan, Morrison, Basu, and Sweeney (2010) indicated that learning styles are often defined as characteristic, cognitive, affective, and physiological behaviours that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment. Learning styles can also be affected by educational experiences. In a study conducted by Meeuwisse, Severiens and Born (2010), students' interaction with teachers and peers, sense of belonging, and study success were measured and compared among ethnic minority and ethnic majority students. A total of 523 students from four universities in the Netherlands participated in the study by completing a questionnaire. Results indicated that the more interactive the learning environment is, the more both groups of ethnic students develop high quality formal relationships with their teachers, thus predicting their academic success (Meeuwisse et al., 2010). However, this study

had limitations. There was no indication of how personal upbringing and prior education impacted a student's ability to achieve academic success. Future research that includes a student's history/background could provide additional insight.

Chen, Jones, and Moreland (2014) also acknowledged that individuals have different preferences for receiving and processing information. The rationale for identifying learning styles is that a generalized teaching style is inherently exclusionary and inhibits efficient and effective learning (Heffernan et al., 2010). Heffernan et al. (2010) measured the learning styles of Australian and Chinese business students by administering surveys to gain better insight to possible learning style differences. Results of this study found that there were significant learning style differences between the two groups. Chinese and Australian students were both more active than reflective; however, Australian students were significantly more active in their learning (Heffernan et al., 2010). The results of this study reinforce a common hypothesis of varying cultures having different learning styles. This study also recommends that learning outputs should be relatable to all types of learning styles in order to accommodate different people. Future research could analyze a larger group of individuals, not restricted to just students however to include varying age groups and cultures.

## 2.3. Description of Mindsight

Mindsight is an e-learning mental health module developed in 2010 and is designed to promote mental health awareness and decrease stigma by educating individuals about common mental illnesses, support strategies, treatment options, and available resources (Mindsight, 2010). This resource consists of nine sectioned

tabs that each pertain to an individual illness including depression, anxiety, substance use, suicide, self-harm, bipolar disorder, eating disorders, psychosis, and trauma; a tenth section is about stigma. At the end of each section, there is a set of five multiple choice questions based upon the information that has been reviewed. After completing the ten sets of questions and achieving 80% on each of the quizzes, the user is eligible to apply for a Mindsight certificate.

Each of the nine tabs includes information relative to its specified illness. This includes a discovery board, a 'Did you know' section, and support and/or resources tab. Each discovery board contains a short video that is an overview of the illness; the signs and symptoms relative to the condition; the story of an individual who has experienced the mental illness; strategies for helping a friend, colleague, family member; self-help strategies; and treatment options. In addition, the 'Did you know' section on each tab contains a variety of facts and statistics about the illness. There is also a support section specific to each illness that has been divided into Support and Treatment, and Education Resources (Mindsight, 2010), which highlight available resources, services, additional educational materials and websites. Mindsight takes approximately two hours to complete.

Mindsight provides an alternative method of education to users to help eliminate the stigma associated with mental illness. Mindsight can be used as an educational resource by anyone who has access to a computer; the online format provides a level of privacy and anonymity that can be very appealing to many individuals. Further, the support and educational resources provide health care options that individuals may otherwise not have known about.

# **Chapter 3: Theoretical Frameworks**

The literature review identified a need to devote more attention to how mental illness is experienced by culturally/racially diverse populations. Additionally, although online learning has been demonstrated to be fairly successful in educating populations, a review of the literature identified a need for additional research in the area of online mental health education, and particularly with diverse populations as studies show there is a potential difference in learning styles and perceptions/views of mental illness amongst these groups.

Three theoretical frameworks were selected to guide the research process and to provide a context for interpreting the study's findings: Cognitive Flexibility

Theory (CFT), Technology Acceptance Model (TAM) and Hofstede's Cultural

Dimensions Theory (CDT).

# 3.1. Cognitive Flexibility Theory

# 3.1.1. Description.

McMinn (2001) describes the Cognitive Flexibility Theory (CFT) as derived from constructivist theories (constructing own knowledge), subsumption theory (new and previously learned materials should be integrated) and genetic epistemology (learning by adapting learnt behaviour to new situations). Ill-structured domains which can be understood as domains of knowledge that present a large degree of variation from case to case (Lima, Koehler, & Spiro, 2004), are central to CFT. According to CFT, cognitive flexibility refers to the ability to flexibly shift between multiple incompatible perspectives or descriptions of an object or event (Farrant, Fletcher, & Maybery, 2014). CFT pertains to learning through nonlinear hyperlinked media, such as websites (Lowrey)

& Kim, 2009). Lowrey and Kim (2009) assert that when media interweaves case examples from a knowledge area with different conceptual perspectives, individuals' cognitive structures become more flexible and learning is applied more successfully across diverse settings. Using a diverse range of multimedia tools to educate the user can therefore be more assistive than a tool that lacks a variety of designs. Lima et al. (2004) also indicated that CFT is useful for suggesting multiple perspectives to make advanced learning with hypertextual interfaces a richer experience by taking multiple perspectives and creating a multitude design. With CFT being best suited for domains of knowledge that are ill-structured (presenting a large degree of variation from case to case), this method can therefore be accommodating to a variety of different learning styles. Further, a hypertextual design using CFT can facilitate transfer of knowledge to new situations (Lima et al., 2004). This can help the user to apply knowledge learned in everyday scenarios. This type of learning environment stimulates creative and critical thinking by allowing users to look at the same problem-situations from multiple perspectives within a self-controlled, interactive environment (Lima et al., 2004).

# 3.1.2. Model application.

Research in the area of CFT demonstrates its effectiveness in knowledge transfer to new situations over traditional learning methods. CFT was therefore a reliable and assistive framework when evaluating Mindsight in this study. CFT maintains that a resource with a variety of learning options for its users can be effective for knowledge acquisition (Lima et al., 2004). Mindsight features videos, 'Did You Know' sections, quizzes, support/resources, and more, which enable the user to acquire mental health information from a variety of different sources. By

viewing Mindsight from this theoretical perspective, the individual learning tools that are featured in Mindsight are reflective of the different conceptual perspectives that provide maximized learning experiences for its users. It was the role of the researcher to develop questions that reflected this guiding lens.

The CFT framework assisted the researcher to develop the thesis research questions, including a portion of questions from the Evaluation of Mindsight survey and various focus group guiding questions in Phase Two that pertained to learning about mental health from Mindsight. Statements were categorized into usefulness/value and format and then cross-referenced with CFT.

According to CFT, the value and usefulness of a web resource can be measured by its application after use. In requesting information regarding the application of knowledge gained through Mindsight as well as attitude towards mental illness after completing Mindsight, the researcher was able to determine if Mindsight was a useful tool to its users. Similar to usefulness, the value of the resource is a characteristic that CFT employs. In determining the value of the resource, if users are able to learn using the hypertextual principles of CFT and find value in what they learned, they are likely to recommend Mindsight to someone else. Therefore by also inquiring about the willingness to recommend, the researcher was able to determine if Mindsight was a valuable learning tool.

CFT indicates that when learning information can be classified as ill-structured, it is likely that revisiting the material at different times, in rearranged contexts, and from different perspectives will create enhanced learning. Therefore, questions were developed in order to evaluate the structure and overall presentation of Mindsight. Understanding

the ease of navigation and competency with the formatting, assisted the researcher to determine if Mindsight was a user-friendly resource that could predict future use of the resource. Using the framework of CFT, usefulness can be demonstrated by showcasing overall applicability of Mindsight from the perspectives of individuals who have completed this resource.

# 3.2. Technology Acceptance Model

# 3.2.1. Description.

The TAM was introduced to explain computer usage behavior and was based on the theory of reasoned action, a psychological theory that seeks to explain behavior (King & He, 2006). The TAM has the potential to identify, explain, and predict factors, such as internal beliefs and attitudes, which have an effect on the intentions of technology end users (Kowitlawakul, 2011). Legris, Ingham and Collerette (2003) indicate that the TAM examines the mediating role of perceived ease of use (E) and perceived usefulness (U) in their relation between systems characteristics (external variables) and the probability of system use (an indicator of system success). The TAM specifies the causal linkages between two key beliefs: U and E, which are divided between users' attitudes and intentions and actual computer adoption behavior (Davis, Bagozzi, & Warshaw, 1989).

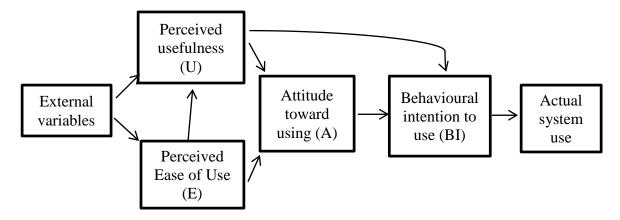


Figure 1: Technology Acceptance Model (Legris et al., 2003)

The TAM theorizes that the U and E are of primary relevance for computer acceptance behaviours. Perceived usefulness is defined as the prospective user's subjective probability that using a specific application system will increase his or her performance within an organizational context (Davis et al., 1989). Perceived ease of use refers to the degree to which the prospective user expects the target system to be free of effort (Davis et al., 1989).

# 3.2.2. Model application.

Hu, Chau, Liu Sheng, and Kar Yan (1999) further specify that the goal of the TAM is to provide an explanation of the determinants of computer acceptance, capable of explaining user behavior across a broad range of end-user computing technologies and user populations. With this study evaluating a web-based resource, the TAM had a significant impact on the development of the methodology and data collection since it is a prevalent framework for Internet usage. The research questions, Evaluation of Mindsight survey, and the focus group guiding questions to evaluate Mindsight were largely based on the constructs associated with the TAM (U, E, A, BI, & actual system use). The four constructs, perceived usefulness, perceived ease of use, attitude toward using, and behavioural intention to use are key predictors of TAM's fifth construct, actual system use. The TAM maintains that user acceptance of the web-based resource is a key factor to success. The researcher tried to formulate questions that were best reflective of usefulness. Therefore, questions that probed use of the resource, application after use, increased knowledge and understanding, and recommendation of use to someone else, were able to attest to the usefulness and value that Mindsight offers its users. The TAM has increasingly provided a stable and simplistic framework for analyzing a variety of

web related models and is one of the most widely used resources (King & He, 2006); therefore, the researcher was confident that using this theoretical guide would facilitate relevant results.

The perceived ease of use was pertinent to actual system use, as reflected in the TAM. By ensuring that the Mindsight resource is a user-friendly tool, it is likely that users will be more inclined to utilize the resource. Therefore, TAM's constructs facilitated the analysis of participants' perspectives of the usefulness of Mindsight in Phase One as well as the development of the focus group guiding questions that the researcher used to generate a discussion in Phase Two.

# 3.3. Hofstede's Cultural Dimensions Theory

# 3.3.1. Description.

The Hofstede theory identifies five dimensions: power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation (Shi & Wang, 2011) which were helpful in determining cultural similarities and differences in this study's participants. The five dimensions can be understood as follows: (a) power distance is defined as the extent to which the members of a society accept that power in institutions and organizations is distributed unequally, (b) individualism implies a preference for a loosely knit social framework in which individuals are supposed to take care of themselves and their immediate families only, (c) masculinity stands for a society in which social gender roles are clearly distinct, (d) uncertainty avoidance has to do with the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity, leading them to support beliefs that promise certainty and to maintain institutions that protect conformity, and (e) long-term orientation refers to persistence and

personal stability, as well as respect for tradition where culture programs its members to accept delayed gratification of their material, social, and emotional needs (Arrindell, 2003). Hofstede's CDT attributes society's culture to the principles of its members and how behaviour is related to these principles. Hofstede's work on dimensions of culture has been described as a dominant explanation of behavioural differences between nations (Cronje, 2011). The researcher created a model to illustrate Hofstede's theory of cultural differences shown in Figure 2.

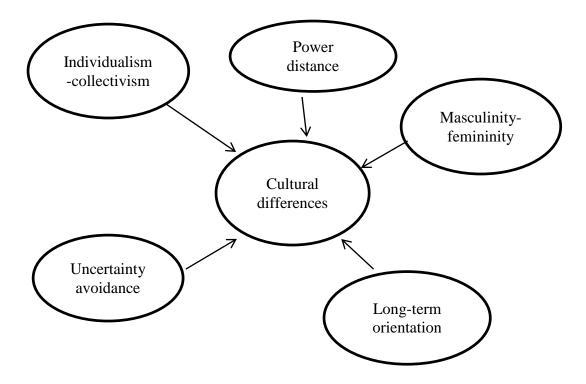


Figure 2: Hofstede's five dimensions of cultural differences according to the researcher

# 3.3.2. Model application.

Hofstede's CDT has been referred to as a strong foundation for cross-cultural research and is the most widely used cultural framework (Soares, Farhangmehr, &

Shoham, 2007). With this current study focusing on whether Canadian and Other than Canadian populations shared similar or different perspectives of Mindsight as a mental health/illness awareness resource, it was important for the researcher to use a framework to guide the research. Hofstede's CDT was used to develop the research questions, part of the Evaluation of Mindsight survey, and the focus group guiding questions.

Hofstede's cultural dimensions have frequently been used to compare cultures (Soares et al., 2007). The researcher attempted to compare and contrast the perspectives of Mindsight users based on ethnicity to determine if ethnicity impacted their views towards mental health/illness and Mindsight. Research has confirmed the relevance of the cultural dimensions in marketing and consumer behavior, two aspects that can be mirrored in awareness of mental health information and user behavior. The research questions (1.a and 3.) that inquired into same or different perceptions of mental health/illness and Mindsight based on ethnicity were developed using the uncertainty avoidance dimension, which indicates that culture programs its members to feel either uncomfortable or comfortable in unstructured situations (Cronje, 2011). The individualism and collectivism dimensions helped to inform the Evaluation of Mindsight statements that were relative to Mindsight being a culturally reflective resource. Some of the Evaluation of Mindsight statements targeted how participants identified themselves and if they found the resource relatable to that self-identification. Lastly, the focus group guiding questions reflected both the individualism and collectivism dimension, as well as the uncertainty avoidance dimension.

Therefore, Hofstede's CDT provided a cultural framework to guide the researcher's questions relative to ethnicity in this study. With Hofstede's CDT being a

commonly used guide in cross-cultural research, the researcher was confident that using this model in this study would yield relevant results. Additionally, the model contributed to the questions being sensitive to ethnicities to enable participants to disclose information relative to the cultural component of this study.

# **Chapter 4: Methodology**

This chapter outlines the methodology of this study including the mixed methods research design, how each research question was addressed, a description of surveys/questionnaires and focus groups, data collection, issues of reliability and validity, and measures taken to ensure confidentiality.

## 4.1. Research Design

This study used a two phase mixed methods research design including both quantitative (demographic survey, Evaluation of Mindsight survey, the Attitudes to Mental Illness Questionnaire (AMIQ)) and qualitative (focus groups) data. Phase One (quantitative) of this study used a cross-sectional design and collected data using online questionnaires. The benefit of quantitative research is that data can be quantified, results aggregated, presented concisely and used to assess relationships between the variables measured (Lakshman, Sinha, Biswas, Charles, and Arora, 2000). Further, using surveys/questionnaires in the quantitative phase of this study facilitated the collection of large amounts of information from a large number of people in a relatively short period of time. This was done in a cost-effective manner, another advantage of the survey/questionnaire method.

Phase Two of this study employed a descriptive, exploratory approach which is frequently used to give authentic insights into people's experiences (Glacken, Kernohan, & Coates, 2001). Qualitative data was collected through focus groups with a sample of participants who completed Phase One. Qualitative research seeks to understand phenomena from the participant's perspective and view of reality (Osterman, Asselin, & Cullen, 2009). Focus groups allow time and space for participants to share their

perceptions, beliefs, and experience, thus enabling the researcher to gain an understanding of a particular phenomenon from the perspective of those who experienced it (Osterman et al., 2009).

# 4.2. Mixed Methods Approach

#### 4.2.1. Mixed methods research.

For years researchers were conflicted in their choice of research methods, either choosing to employ a quantitative design or a qualitative design (Leech & Onquegbuzie, 2009). Now however, researchers have the opportunity to select a third option, that of mixed methods. The research conducted in the health sciences lends itself to a mixed methods approach because many of the areas being studied are complex and there is a focus on translating the results into practice (Aaron, 2011). Many social scientists now believe there is no problem area that should be studied exclusively with one research method (Terrell, 2012). Both quantitative and qualitative data are collected to improve the depth and strength of the study (Aaron, 2011). Terrell (2012) argues that although a major weakness of the mixed methods approach is that it is very time consuming, it can be relatively straightforward to describe and can yield greater depth of understanding through its mixed features.

# 4.2.2. Phase One: Surveys/questionnaires.

The use of self-administered surveys is considered to be an important tool for researchers (Brommage, 2006). A survey usually originates when a need for information becomes apparent and there are insufficient data available (Brommage, 2006). Frickler and Schonlau (2002) indicate that Internet-based surveys have become increasingly common in research for three reasons: (a) Internet-based

surveys are much cheaper to conduct, (b) Internet-based surveys are faster, (c) when combined with other survey modes, Internet-based surveys have the potential to obtain higher response rates than conventional survey modes alone. Overall, the advantages of an online survey exceed the disadvantages, enabling it to be one of the more prevalent research methods for obtaining data.

For Phase One of this study, three surveys/questionnaires were used in order to collect data from participants: a Demographic survey, the AMIQ, and the Evaluation of Mindsight survey. The surveys were deployed using an online survey tool called Simple Survey from the website simplesurvey.com. Simple Survey allows researchers to upload and deploy surveys to participants through email. As the name suggests, the process of collecting data through Simple Survey is efficient, allowing both the researcher to collect data and individuals to participate in a simplified manner. Each survey/questionnaire allowed the participant to select one option per question in order to categorize responses.

After a review of the literature, a demographic survey was developed in order to describe the sample of individuals in the study (Coffey & Palm, 2003). The survey targeted the general background of participants including their gender, age, ethnicity, education, employment, and relationship to mental health/illness if applicable.

The AMIQ is a short form of the Community Attitudes toward Mental Illness (CAMI) scale that has been shown to be both a valid and reliable tool for measuring attitudes toward mental illness (Taylor & Dear, 1981). The AMIQ was chosen as an alternative to the CAMI because it is a condensed version that is still

able to yield valid results. The concern with using the CAMI stems from its length, which could act as a deterrent to participating in the study. Including the AMIQ in this study was important in determining participant attitudes toward mental illness. For the AMIQ, respondents read a short vignette describing a fictional character with a mental illness and then responded to five statements (Luty, Fekadu, Umoh & Gallagher, 2006). Participants were asked to read the statement, "John has been injecting heroin daily for 1 year." Statements were scored on a five-point Likert scale ranging from strongly agree to strongly disagree and very likely to quite likely with neutral and don't know scored as zero (Luty et al., 2006). The total score for the vignette scenario ranges from -10 to +10 with the positive score indicating a favorable or less stigmatizing attitude towards mental illness.

The Evaluation of Mindsight survey was developed based on the study's research objectives and questions. The survey explored the perceptions of Mindsight users on the usefulness, ease of navigation, and applicability of the resource. The statements included in this survey were developed to reflect the key elements of the three theoretical frameworks used for this study; the CFT, the TAM and the CDT. Statements #1-4 and #7 evaluated the usefulness of Mindsight by asking participants to rate on a Likert-like scale, Mindsight's ability to promote mental health/illness awareness (#1), increase understanding of mental health and self-help strategies (#2), increase understanding of available community resources and supports (#3), facilitate knowledge application in everyday life (#4), and change attitudes towards individual with mental illness (#7). These statements assisted the researcher in determining the overall usefulness of the resource.

Statements #8 and #9 targeted Mindsight's cultural sensitivity by asking questions relative to the content being representative of mental health challenges (#8) and useful as a mental health resource (#9) for different ethnicities. Statements #6, #10, and #12 asked about the format of Mindsight, including the ease of navigation (#6), consideration of different learning styles (#10), and participants' comfort with webbased material (#12). These statements helped to identify participants' technical experience with Mindsight and the web. Lastly, statements #5 and #11 examined the value of Mindsight by probing participants' willingness to recommend the resource (#5) and their perception of the value of the resource for future reference (#11). By including a variety of statements, the researcher was able to collect a diverse range of data relative to Mindsight. As well, these statements provided the basis for the development of the focus group questions.

# 4.2.3. Phase Two: Focus groups.

Focus groups have been used by researchers in the social and behavioural sciences for more than 80 years (Redmond & Curtis, 2009). Focus group research, with its underlying theoretical assumptions, is accepted as a legitimate qualitative methodology (Redmond & Curtis, 2009). Interest in focus group discussions has grown recently, and so has their recognition as a valuable method for qualitative data collection (Colucci, 2007). Currently focus groups are used in a variety of disciplines such as psychology, sociology, anthropology, health sciences, and marketing. The versatility of the discussions provides a comfortable setting for participants to express their opinions on a variety of topics pertaining to the focus of the research. Often focus groups are used as a stand-alone method, but in many

cases they are integrated in a multiple methods design with other qualitative methods and sometimes with quantitative methods (Barbour, 2007). Focus groups also provide a means of listening to the perspective of key stakeholders and learning from their experiences of the phenomenon (Jayasekara, 2012). Further, the focus group method is important when the issue being investigated is complex and when concurrent use of data is necessary for validity (Jayasekara, 2012). This method of group sessions can therefore be very attractive to researchers (Halcomb, Gholizadeh, Digiacomo, Philips, & Davidson, 2007).

In order to stimulate and maintain the focus group discussions, the researcher developed guiding questions. The focus group questions were largely developed from the fundamental aspects of the theoretical frameworks (CFT, TAM, and CDT) as well as the research objectives and research questions. The questions were created to obtain more detailed information regarding the usefulness, applicability and cultural sensitivity of the Mindsight resource. The TAM framework, specifically, played a significant role as the five constructs associated with this model (perceived ease of use, perceived usefulness, attitude toward the technology, intention to use, and social influence) provided a foundation for developing the questions (Davis et al., 1989).

There were five main focus group guiding questions; each question included four to six sub-questions to encourage further discussion. The first question asked participants whether they found the mental health education/information in Mindsight useful. This question had six sub-questions that encouraged participants to elaborate on what they had learned including, whether there was information

they were already familiar with, how their perception of mental health/illness had changed, if they would recommend the resource, whether the tabs were reflective of major mental health issues, and if the information listed under the tabs was informative. The second question asked participants if they found the information they learned helpful in their personal/professional lives. This question included five sub-questions that helped participants describe their personal/professional experience with Mindsight including how they had applied what they learned, how Mindsight helped them cope with everyday struggles, how Mindsight helped them help someone else cope with everyday struggles, if they would consult the resource if they encountered mental illness in the future, and if they would recommend Mindsight to someone who may encounter mental illness. These questions aided the researcher in determining whether or not participants applied what they had learned. The third question asked participants if they found the information provided in Mindsight to be sensitive to varying ethnicities. This question had four sub-questions that encouraged participants to elaborate on their perspective including what aspects of the resource were sensitive to ethnicities, what aspects were not sensitive to ethnicities, what the general perspectives of mental health were in their ethnicity, and if they thought Mindsight could change perspectives about mental illness in ethnicities that may not understand it. These questions aided the researcher in discovering if Mindsight was culturally reflective. The fourth question asked participants, whether Mindsight was an easy web-based resource to navigate through. This question had four sub-questions that asked participants to explain their technical experiences with Mindsight and included what aspects of

Mindsight they liked, what aspects they did not like, if the information was presented in a clear and concise way, and if Mindsight was a user friendly resource. This enabled the researcher to determine if Mindsight needed technical improvements in order to simplify participants' navigation of the resource. The last question asked participants if they felt comfortable talking about mental health/illness. This question had four sub-questions that explored participants' attitudes toward mental illness and included probing whether mental illness is an uncomfortable topic to discuss, what aspects of mental illness they feel uncomfortable talking about, and whether or not Mindsight furthered their comfort level with mental health. By asking participants these questions, the researcher was able to determine the degree to which participants who completed Mindsight held stigmatizing attitudes towards individuals with a mental illness. As an educational resource, Mindsight has the potential to inform individuals about mental health and lessen the stigma associated with mental illness.

# 4.2.4. Addressing the research questions.

Both Phase One and Phase Two of this study addressed each research question. In the first phase, the AMIQ addressed the research question: 1. "Do individuals who have completed Mindsight hold positive views and attitudes towards people with a mental illness?", including the sub-question: a. "Do individuals who have completed Mindsight and self-identify with an ethnic group Other than Canadian share similar and/or different positive views and attitudes towards people with a mental illness when compared to individuals who have completed Mindsight and self-identify as Canadian?" The Evaluation of Mindsight

survey assessed participant perceptions of Mindsight thereby addressing research question: 2. "What are Mindsight certificate holders' perceptions of Mindsight as an online mental health/illness awareness resource?", including the sub-questions a. "Are individuals who have completed Mindsight applying what they have learned in their daily life?"; and b. "What is the ease of use (i.e. ease of navigation; organization and clarity of content) of Mindsight from the perceptions and experiences of the individuals who have completed the resource?" The Evaluation of Mindsight survey also addressed the third research question: 3. "Do individuals who have completed Mindsight and self-identify with an ethnic group Other than Canadian share similar and/or different perceptions of Mindsight as a mental health/illness awareness resource when compared with individuals who have completed Mindsight and self-identify as Canadian?"

Phase Two of this study addressed each research question in detail. The focus groups allowed for verbal responses to be shared and compared during the sessions, thereby adding significantly to the data collected in Phase One. The qualitative data obtained from Phase Two created a more comprehensive representation of participant experiences and perceptions of Mindsight, as well as their attitudes towards mental health/illness. This qualitative method of group sharing was an integral element in gathering more detailed information about the Mindsight resource.

#### 4.3. Data Collection

## 4.3.1. Participant inclusion and exclusion criteria.

Participants needed to be fluent in English in order to comprehend the web-

based survey in Phase One and to participate in the focus groups in Phase Two. Further, all participants were required to have completed Mindsight and to have requested and been sent a Certificate of Completion. For Phase Two, it was also considered beneficial for participants to reside near Oshawa, Ontario, the location selected for the focus group sessions. Lastly, participants were required to be at least 18 years of age in order to sign the consent forms. Participants who did not meet the inclusion criteria were excluded from the study.

#### 4.3.2. Recruitment.

#### Phase One.

Of the 2,500-3,200 Mindsight certificate holders, a total of 1,235 were sent an email invitation to participate in Phase One with a brief description of the study, an attached link to Phase One's consent form, as well as links to each of the surveys/questionnaire (demographic survey, Evaluation of Mindsight survey, and the AMIQ). It was noted within the email that by completing the surveys/questionnaire through the attached link of Simple Survey, individuals were consenting to participate in Phase One of this study. An initial email was sent out to participants (n=1100). A second email was sent a week later reminding individuals about the surveys/questionnaire and thanking them if they had already completed them; this email also contained a link to all three of the surveys/questionnaire. One week after the second email was sent to participants, a decision was made by the principal investigator and research supervisor to add individuals (n=135) who had recently received their Certificate of Completion for Mindsight, totaling invited participants to 1,235. This decision was made in the hopes of increasing the sample

size. Two weeks after this email was sent out, another email was sent out to individuals to thank them and to invite them to participate in Phase Two.

To further encourage participation, all certificate holders were sent an email inviting them to participate in the focus groups. This was done for two reasons. Firstly, the researcher realized after the fact that by using Simple Survey, the researcher was not able to identify the emails that were used to submit the surveys/questionnaire responses, and therefore, was also unable to identify those who had completed the surveys/questionnaire and those who had not. This was an unexpected setback that resulted in the researcher including all certificate holders in the email invitation to participate in the group sessions, instead of just those who had participated in Phase One. Secondly, because participation rates were low, the researcher tried to further encourage participation. The researcher had made all interested participants aware that the surveys/questionnaire for Phase One had to be completed prior to participation in Phase Two. This email also included a brief description of Phase Two with an attached link to Phase Two's consent form. One week after the first email was sent out inviting individuals to participate in Phase Two, a second email with the Phase Two consent form attached, was sent out as a reminder of the focus groups. One week later, an email was sent out contacting those individuals (n=26) who had expressed their interest in participating in Phase Two. In addition to the focus group session details sent to participants, the email also requested participants review Mindsight prior to attending their group session, as the researcher understood that some participants may have completed Mindsight some time ago. Figure 3 outlines the data collection timeline.

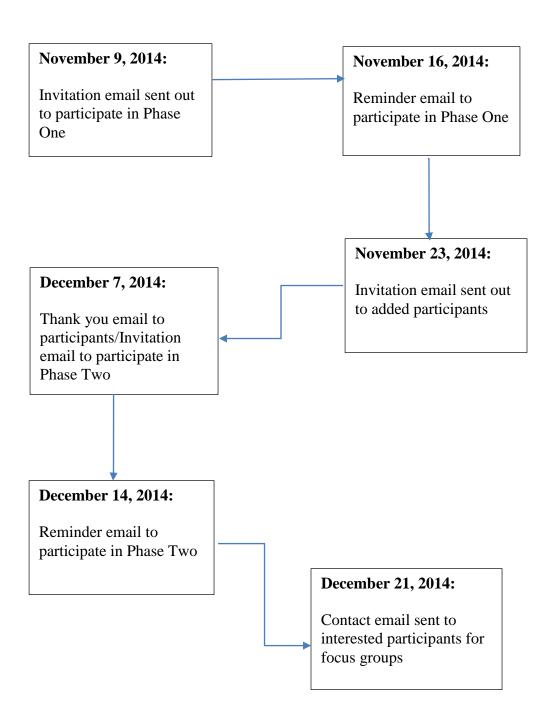


Figure 3: Data collection timeline for Phase One and Phase Two

# Phase Two.

Phase Two was qualitative and involved semi-structured focus groups with

participants who had completed the Phase One surveys/questionnaire and consented to participate in Phase Two. In order to prepare for the focus groups, the researcher arrived early to arrange the classroom furniture in a circle to create a conversational grouping and to place two recorders, one on either side of the room to record the session. Of the 26 participants who had expressed an interest in participating in the focus group sessions, only nine actually came due to poor weather conditions. A total of two focus groups were conducted; one session (n=3) was held on February 1, 2015 and the second one (n=6) was on February 8, 2015. Both sessions took place in a reserved classroom at the University of Ontario Institute of Technology (UOIT) and each lasted approximately two hours.

Semi-structured focus groups are similar to a conversation in which the researcher and participants have a topic and guiding questions but not a firm question-answer set up (Baumbusch, 2010). The goal was to generate discussions about Mindsight. The focus groups were able to collect more detailed information about Mindsight certificate holders' perceptions of Mindsight as an online mental health/illness awareness resource, including how they had been able to apply what they had learned, how they had been able to use the information to raise awareness of mental health/illness, and the strengths and weaknesses of Mindsight as well as ways to improve the resource. Although the researcher attempted to contact participants multiple times to reschedule a third group session to accommodate remaining participants, participants were no longer able to attend due to time and weather constraints.

# 4.3.3. Sample.

A targeted convenience sample was obtained for the purpose of this study. At the time of data collection, between 2,500-3,200 individuals had completed Mindsight and received a Certificate of Completion. Data was collected for Phase One between November 9, 2014 and December 7, 2014. The final number of participants was n=105 for the demographic survey, n=90 for the Evaluation of Mindsight survey, and n=40 for the AMIQ.

Data was collected for Phase Two between February 1, 2015 and February 8, 2015 and, although it was anticipated that many of the Phase One participants would agree to take part in Phase Two, the final response rate for Phase Two was low (n=9). When selecting individuals for the focus groups, the initial intention was to categorize participants into groups according to their self-identified ethnicity. However, since response rates were below 10% for all three surveys, all participants interested in attending the focus group were invited. In addition, there was a draw for a free pair of movie tickets for participants who took part in Phase Two's focus groups. This draw was done in order to recognize participation throughout the study. For those individuals who withdrew from the study prior to the completion of Phase Two, their names were still included in the draw for the movie tickets.

## 4.4. Data Analysis

## 4.4.1. Phase One data analysis.

Descriptive statistics were used for Phase One to describe the study population according to demographic information (sex, age, ethnic group, occupation, and experience with mental illness) and responses to the online surveys/questionnaire (i.e. Evaluation of Mindsight, AMIQ). However, not all participants who completed the demographic survey went on to complete the AMIQ and Evaluation of Mindsight survey. Results from the Evaluation of Mindsight survey are presented in a table according to each question. Results from the AMIQ are summarized in two tables according to Canadian and Other than Canadian responses.

Results from the AMIQ from all those who completed this measure addressed research question: 1. "Do individuals who have completed Mindsight hold positive views and attitudes towards people with a mental illness?" Analytic statistics were used to address research question 1.a: "Do individuals who have completed Mindsight and self-identify with an ethnic group Other than Canadian share similar and/or different positive views and attitudes towards people with a mental illness when compared to individuals who have completed Mindsight and self-identify as Canadian?"

Using the Mann-Whitney U Test, responses to the AMIQ from individuals who self-identified as Canadian were compared with the responses of the participants who self-identified as being from an ethnic group Other than Canadian in order to determine if they differed in their attitudes towards individuals with a mental illness.

$$U_1 = n_1 n_2 + \frac{n_1 (n_1 + 1)}{2} - R_1 \qquad \text{and} \qquad U_2 = n_1 n_2 + \frac{n_2 (n_2 + 1)}{2} - R_2$$

Figure 4: The test statistic for the Mann-Whitney U Test is U, the smaller of  $U_1$  and  $U_2$ , where  $n_1$ = number of Canadians,  $n_2$ =number of Other than Canadians,  $R_1$ =sum of ranks for Canadians and  $R_2$ = sum of ranks for Other than Canadians.

The Mann-Whitney U test is appropriate in this situation since the AMIQ uses a 5-point ordinal scale. This statistical test has also been used by past researchers using the AMIQ (Luty et al. 2006). The mean ranked score was calculated to determine the test statistic and resulting p value (Gravetter & Wallnau, 2009). Statistical test results were considered significant when p<0.05 (Connelly, 2011). All calculations were done on the statistical software SPSS and are based on responses that were correctly scored.

# 4.4.2. Phase Two data analysis.

In Phase Two, the focus group data was analyzed by the researcher reading through each of the transcripts and identifying and coding major themes and subthemes as they related to the research questions. A qualitative coding software (NVivo10) was also used to assist in the analysis. Participant quotes from the focus group data were selected for the results portion of this study based on the quality and relativity of their responses to the specific question being discussed. Some participants were more forthcoming with comments regarding Mindsight than other participants.

## 4.5. Issues of Reliability and Validity

For Phase One's quantitative phase of the research, a valid and reliable

tool—the AMIQ—was used to collect data (Luty et al., 2006). Focus group discussions were recorded and transcribed verbatim for credibility.

#### 4.6. Ethical Considerations

Ethical considerations for this study were met according to the Research Ethics Board (REB) of UOIT—File 14—012. Two consent forms were included in this study, one for each stage of the research. All participants signed a consent form prior to their start in this study. The contact information of individuals who completed Mindsight and the data collected in Phase One and Phase Two were kept in a password protected USB and hard drive, accessible only to the researcher and research supervisor. The data collected did not include names and participants and anonymized for the duration of this study when reporting findings. The researcher was able to identify study responses by the IP addresses provided in order to link responses between the three data collection tools for the purpose of data analysis for Phase One. Participants were also assigned a number at the time of the focus group sessions for Phase Two and informed that this is how they would be identified for the duration of the group session. Participants were also informed in the consent forms for Phase One and Two that they could choose to withdraw from the study at any time prior to analysis of the data. Also, specified in this section was that participants could request that their data be removed from data collection if they chose to withdraw prior to data analysis. (See Phase One and Phase Two consent forms in Appendix A and Appendix B, section "Can participation in the study end early?"). Data collected was also reported accurately to represent the perceptions and experiences of participating individuals.

# **Chapter 5: Results**

Mindsight certificate holders were recruited for a two phase research study to explore both their perceptions of Mindsight as an online mental health/illness awareness resource and their views and attitudes towards people with a mental illness.

# 5.1. Quantitative

The first phase of this study was quantitatively based and included two online surveys (demographic, Evaluation of Mindsight) and one online questionnaire (AMIQ) for participants to complete. The results are summarized in the following sections.

# 5.1.1. Demographic survey.

The first survey in this study described the characteristics of the participants from the sample population. Of the 1,235 who were sent an email invitation to participate, 105 participants completed the demographic information, a response rate of 8.50%.

Participants were asked to specify their date of birth in the form of DD/MM/YYYY. The average age of demographic survey participants was 35.9 (SD=14.65) with ages ranging from 18-71. A summary of participant gender and ages is listed in Table 1.

Table 1: Gender and ages of Mindsight participants at time of data collection

Age	F	%	M	%	N	%
18-24	24	32	12	40	36	34.29
25-34	15	20	3	10	18	17.14
35-44	11	14.67	1	3.33	12	11.43
45-54	13	17.33	9	30	22	20.95
55-64	10	13.33	2	6.67	12	11.43
Age 65 or	1	1.33	2	6.67	3	2.86
older						
Did not	1	1.33	1	3.33	2	1.90
specify						
Total	75	100	30	100	105	100

## 5.1.1.1. Ethnicities.

In order to gain insight into their ethnicities and cultural backgrounds, participants were asked if they identified with an ethnic group Other than Canadian. A total of 42 participants (40%) answered yes and 63 participants (60%) answered no.

# 5.1.1.2. Ethnic group Other than Canadian.

Participants who identified with an ethnic group Other than Canadian were asked to select the ethnic group that best applied to them. The 'Other' category was the most frequently selected ethnic option. Table 2 summarizes participants' ethnicities.

*Table 2: Self-identified ethnicities of Mindsight participants* 

Ethnicity	n	%
Latino/Hispanic	2	4.76
Middle Eastern	2	4.76
African	3	7.14
Caribbean	6	14.29
South Asian	6	14.29
East Asian	5	11.90
Mixed	5	11.90
Other	13	30.96
Total	42	100

# 5.1.1.3. Highest level of education.

Participants were also asked to report the highest level of education they had completed. Only one (0.95%) participant completed less than high school. Table 3 summarizes these results.

Table 3: Highest level of education completed by Mindsight participants

Highest level of education completed	n	%
Less than high school	1	0.95
High school	25	23.81
Post-secondary (university, college, trades	66	62.86
school)		
Post-graduate (Master's, Doctorate)	13	12.38
Total	105	100

# 5.1.1.4. Employment status.

Participants were asked to disclose their employment status. The majority (91.43%) of participants indicated they were either employed (67, 63.81%) or a student (29, 27.62%). The participants' employment status is summarized in Table 4.

Table 4: Current employment status of Mindsight participants

Employment status	n	%
Employed	67	63.81
Out of work	3	2.86
Homemaker	1	0.95
Student	29	27.62
Retired	3	2.86
Unable to work	1	0.95
Other	1	0.95
Total	105	100

# 5.1.1.5. Occupation category.

Despite 67 participants indicating they were employed, a total of 71 participants chose an occupation category. Government/public services, Healthcare,

Teacher/educator, and Other were the most selected response options of the occupation categories. The results of participants' occupations are summarized in Table 5.

Table 5: Current employment occupations of Mindsight participants

Occupation category	n	%
Teacher/educator	19	26.76
Government/public services	16	22.53
Healthcare—medical	12	16.90
services and products		
Other	12	16.90
Law enforcement/military	5	7.04
Services (retail sales, clerk,	3	4.23
etc.)		
Sales (sales person, broker,	2	2.82
etc.)		
Financial services	1	1.41
Real estate services/property	1	1.41
management		
Agriculture/farmer	0	0
General business/office	0	0
worker		
Hospitality and recreation	0	0
Laborer (hourly worker,	0	0
machine operator, etc.)		
Manufacturing—	0	0
consumer/industrial goods		
Transportation services	0	0
Total	71	100

# 5.1.1.6. Personal contact with individual with mental health/illness.

Many participants reported having had personal contact with a person who has been diagnosed with a mental illness. Of the 105 participants, 83 (79.05%) participants reported they had contact, and 22 (20.95%) reported having no personal contact.

# 5.1.1.7. Contact with someone who had or they themselves had received treatment for mental illness.

The majority of participants also indicated that they or someone they know had received treatment for a mental illness. Specifically, 87 (82.86%) participants indicated

yes and 18 (17.14%) indicated no.

### 5.1.2. Attitudes to mental illness questionnaire (AMIQ).

The AMIQ addresses research questions 1. and 1.a. A total of 87 of the 1,235 invited study participants completed the AMIQ (response rate of 7.04%). However, despite providing specific instructions for completing the AMIQ, many participants did not select their response from the correct options. Therefore, the responses of participants who did not complete the AMIQ correctly were excluded from the statistical analysis and reporting of the results. Of the 40 participants who completed the AMIQ correctly, 8 were male, 31 were female and 1 did not specify their gender. The mean age was 35.72 (SD=14.68). The total mean score for both self-reported Canadian and self-reported Other than Canadian participants in this study was -3.00 (SD= 2.91, median= -3). The mean score for Canadian participants (n= 26) was -2.92 (SD= 3.10). The mean for the Other than Canadian participants (n= 14) was -3.14 (SD= 2.63).

Individual scores, means, medians and standard deviations are provided in Tables 6 and 7 (Canadian and Other than Canadian). Results for participants who self-identified as Canadian were compared with results for participants who self-identified as an ethnic group Other than Canadian. The Mann Whitney U Test revealed no statistically significant differences (U=167.5; z=0.4; p=0.344).

Table 6: AMIQ scores of self-identified Canadian Mindsight participants

Participant	Score
1	-10
2	0
3	-3
4	-3
5	1
6	-5
7	-6
8	-7
9	-2
10	<u> </u>
11	-3
12	1
13	-2
14	-1
15	-5
16	-8
17	-1
18	-6
19	-4
20	0
20	-2
	-3
22	-3 -2
23	
24	1
25	2
26	-1
Total	-76

Table 7: AMIQ scores of self-identified Other than Canadian Mindsight participants

Participant	Score	
27	-6	
28	-4	
29	2	
30	-3	
31	-6	
32	-4	
33	-2	
34	-6	
35	-6	
36	-2	
37	-1	
38	1	
39	-5	
40	-2	
Total	-44	Mean= -3.14
		Standard Deviation= 2.63
		Mean rank= 19.5
		Median= -3.5

### **5.1.3.** Evaluation of Mindsight.

The Evaluation survey addressed research questions 2., 2.a., 2.b. and 3. A total of n=90 participants (53 Canadian and 37 Other than Canadian) completed the Evaluation of Mindsight survey (response rate of 7.29%) of the 1,235 invited participants. Of the n=90 participants, 68 were female, 21 were male, and 1 did not specify their gender. The average age of participants was 36.10 (SD=14.64) with three participants not specifying their age. Participants were provided with a series of statements related to Mindsight and then asked to choose the response that best reflected their perspective on a Likert-like scale with statement responses including strongly agree-strongly disagree. Responses to each statement are summarized below along with a breakdown by ethnicity: Canadian and Other than Canadian.

## 5.1.3.1. Statement #1: Mindsight is a useful online resource for promoting mental health/illness awareness.

Thirty-five (38.89%) participants strongly agreed, 47 (52.22%) agreed, 6 (6.67%) were undecided, 2 (2.22%) disagreed and 0 strongly disagreed. These responses are summarized in Table 8.

Table 8: Participants' responses to Statement #1 focusing on usefulness of Mindsight

Choice	n (%)	Canadian	Other than
		(%)	Canadian (%)
Strongly agree	35 (38.89)	21 (39.62)	14 (37.84)
Agree	47 (52.22)	28 (52.83)	19 (51.35)
Undecided	6 (6.67)	4 (7.55)	2 (5.41)
Disagree	2 (2.22)	0	2 (5.41)
Strongly	0	0	0
disagree			
Total	90	53	37

## 5.1.3.2. Statement #2: Having completed Mindsight, I have a greater understanding of mental illness and some of the self-help strategies.

Twenty-nine (32.22%) participants responded strongly agree, 43 (47.78%) agree, 13 (14.44%) were undecided, 5 (5.56%) disagreed, and 0 strongly disagreed. These results are summarized in Table 9.

Table 9: Participants' responses to Statement #2 focusing on greater understanding of mental illness after completion of Mindsight

Choice	n (%)	Canadian	Other than
		(%)	Canadian (%)
Strongly agree	29 (32.22)	16 (30.19)	13 (35.14)
Agree	43 (47.78)	24 (45.28)	19 (51.35)
Undecided	13 (14.44)	10 (18.87)	3 (8.11)
Disagree	5 (5.56)	3 (5.66)	2 (5.41)
Strongly	0	0	0
disagree			
Total	90	53	37

# 5.1.3.3. Statement #3: Having completed Mindsight, I have a greater understanding of resources and supports that are available in the community.

Twenty-six (28.89%) respondents strongly agreed, 40 (44.44%) agreed, 15 (16.67%) were undecided, 9 (10%) disagreed, and 0 strongly disagreed. These results are summarized in Table 10.

Table 10: Participants' responses to Statement #3 focusing on greater understanding of community resources after completion of Mindsight

Choice	n (%)	Canadian	Other than
		(%)	Canadian (%)
Strongly agree	26 (28.89)	14 (26.42)	12 (32.43)
Agree	40 (44.44)	23 (43.40)	17 (45.95)
Undecided	15 (16.67)	11 (20.75)	4 (10.81)
Disagree	9 (10)	5 (9.43)	4 (10.81)
Strongly	0	0	0
disagree			
Total	90	53	37

## 5.1.3.4. Statement #4: I am able to apply some of the knowledge I gained from completing Mindsight in my everyday life (work life, personal life, etc.).

Twenty-three (26.14%) participants strongly agreed, 39 (44.32%) agreed, 21 (23.86%) were undecided, 5 (5.68%) disagreed, and 0 strongly disagreed. These results are summarized in Table 11.

Table 11: Participants' responses to Statement #4 focusing on application of knowledge gained from Mindsight in everyday life

Choice	n (%)	Canadian	Other than
		(%)	Canadian (%)
Strongly agree	23 (26.14)	12 (23.53)	11 (29.73)
Agree	39 (44.32)	24 (47.06)	15 (40.54)
Undecided	21 (23.86)	12 (23.53)	9 (24.32)
Disagree	5 (5.68)	3 (5.89)	2 (5.41)
Strongly	0	0	0
disagree			
Total	88	51	37

# 5.1.3.5. Statement #5: I will recommend Mindsight to other individuals who are looking for a mental health/illness awareness resource.

Forty-one (45.56%) participants strongly agreed, 34 (37.78%) agreed, 11 (12.22%) were undecided, 4 (4.44%) disagreed, and 0 strongly disagreed. These results are summarized in Table 12.

Table 12: Participants' responses to Statement #5 focusing on recommendation of Mindsight

Choice	n (%)	Canadian	Other than
		(%)	Canadian (%)
Strongly agree	41 (45.56)	22 (41.51)	19 (51.35)
Agree	34 (37.78)	22 (41.51)	12 (32.43)
Undecided	11 (12.22)	7 (13.21)	4 (10.81)
Disagree	4 (4.44)	2 (3.77)	2 (5.41)
Strongly	0	0	0
disagree			
Total	90	53	37

## 5.1.3.6. Statement #6: I found Mindsight to be a relatively easy resource to navigate through.

Thirty-two (35.56%) strongly agreed, 49 (54.44%) agreed, 8 (8.89%) were

undecided, 1 (1.11%) disagreed, and 0 strongly disagreed. These results are summarized in Table 13.

Table 13: Participants' responses to Statement #6 focusing on ease of navigation of Mindsight

Choice	n (%)	Canadian	Other than
		(%)	Canadian (%)
Strongly agree	32 (35.56)	23 (43.40)	9 (24.32)
Agree	49 (54.44)	23 (43.40)	26 (70.27)
Undecided	8 (8.89)	6 (11.32)	2 (5.41)
Disagree	1 (1.11)	1 (1.89)	0
Strongly	0	0	0
disagree			
Total	90	53	37

# 5.1.3.7. Statement #7: Overall, my completion of Mindsight has had a positive impact on my attitudes towards individuals with mental illness.

Twenty-nine (32.58%) strongly agreed, 45 (50.56%) agreed, 10 (11.24%) were undecided, 5 (5.62%) disagreed, and 0 strongly disagreed. One participant did not submit a response to this statement. These results are summarized in Table 14.

Table 14: Participants' responses to Statement #7 focusing on the impact Mindsight has had on attitudes towards individuals with a mental illness

Choice	n (%)	Canadian	Other than
		(%)	Canadian (%)
Strongly agree	29 (32.58)	19 (35.85)	10 (27.78)
Agree	45 (50.56)	25 (47.17)	20 (55.56)
Undecided	10 (11.24)	6 (11.32)	4 (11.11)
Disagree	5 (5.62)	3 (5.67)	2 (5.56)
Strongly	0	0	0
disagree			
Total	89	53	36

# 5.1.3.8. Statement #8: I found the content provided in Mindsight to be representative of the mental health challenges that individuals from different ethnicities may face.

Seventeen (18.89%) strongly agreed, 38 (42.22%) agreed, 29 (32.22%) were undecided, 5 (5.56%) disagreed, and 1 (1.11%) strongly disagreed. These results are summarized in Table 15.

Table 15: Participants' responses to Statement #8 focusing on Mindsight content being ethnically representative of mental health challenges

Choice	n (%)	Canadian	Other than
		(%)	Canadian (%)
Strongly agree	17 (18.89)	8 (15.09)	9 (24.32)
Agree	38 (42.22)	23 (43.40)	15 (40.55)
Undecided	29 (32.22)	17 (32.08)	12 (32.43)
Disagree	5 (5.56)	5 (9.43)	0
Strongly	1 (1.11)	0	1 (2.70)
disagree			
Total	90	53	37

## 5.1.3.9. Statement #9: I think Mindsight is a useful mental health/illness awareness resource for individuals from different ethnicities.

Seventeen (19.10%) participants strongly agreed, 35 (39.33%) agreed, 33 (37.08%) were undecided, 3 (3.37%) disagreed, and 1 (1.12%) strongly disagreed. One individual did not submit a response to this statement. These results are summarized in Table 16.

Table 16: Participants' responses to Statement #9 focusing on the usefulness of Mindsight for individuals from different ethnicities

Choice	n (%)	Canadian	Other than
		(%)	Canadian (%)
Strongly agree	17 (19.10)	8 (15.38)	9 (24.32)
Agree	35 (39.33)	22 (42.31)	13 (35.14)
Undecided	33 (37.08)	19 (36.54)	14 (37.84)
Disagree	3 (3.37)	3 (5.77)	0
Strongly	1 (1.12)	0	1 (2.70)
disagree			
Total	89	52	37

# 5.1.3.10. Statement #10: The format of Mindsight takes into consideration the different learning styles of individuals.

Eighteen (20.45%) participants strongly agreed, 44 (50%) agreed, 21 (23.87%) were undecided, 5 (5.68%) disagreed and 0 strongly disagreed. Two participants did not submit a response to this statement. These results are summarized in Table 17.

Table 17: Participants' responses to Statement #10 focusing on Mindsight's format being considerate of different learning styles

Choice	n (%)	Canadian	Other than
		(%)	Canadian (%)
Strongly agree	18 (20.45)	11 (20.75)	7 (20)
Agree	44 (50)	26 (49.06)	18 (51.43)
Undecided	21 (23.87)	13 (24.53)	8 (22.86)
Disagree	5 (5.68)	3 (5.66)	2 (5.71)
Strongly	0	0	0
disagree			
Total	88	53	35

## 5.1.3.11. Statement #11: Mindsight is a valuable mental health/illness resource for future reference.

Thirty-three (37.08%) strongly agreed, 42 (47.19%) agreed, 11 (12.36%) were

undecided, 3 (3.37%) disagreed, and 0 strongly disagreed. One participant did not submit a response to this statement. These results are summarized in Table 18.

Table 18: Participants' responses to Statement #11 focusing on Mindsight being a useful resource to reference in future

Choice	n (%)	Canadian	Other than
		(%)	Canadian (%)
Strongly agree	33 (37.08)	22 (42.31)	11 (29.73)
Agree	42 (47.19)	22 (42.31)	20 (54.05)
Undecided	11 (12.36)	7 (13.46)	4 (10.81)
Disagree	3 (3.37)	1 (1.92)	2 (5.41)
Strongly	0	0	0
disagree			
Total	89	52	37

# 5.1.3.12. Statement #12: I frequently consult and am comfortable with using web-based materials for information.

Forty-two (46.67%) strongly agreed, 39 (43.33%) agreed, 8 (8.89%) were undecided, 0 disagreed, and 1 (1.11%) strongly disagreed. These results are summarized in Table 19.

Table 19: Participants' responses to Statement #12 focusing on comfort with using webbased materials for information

Choice	n (%)	Canadian	Other than
		(%)	Canadian (%)
Strongly agree	42 (46.67)	26 (49.06)	16 (43.24)
Agree	39 (43.33)	21 (39.62)	18 (48.65)
Undecided	8 (8.89)	6 (11.32)	2 (5.41)
Disagree	0	0	0
Strongly	1 (1.11)	0	1 (2.70)
disagree			
Total	90	53	37

### 5.2. Qualitative

The second phase of this research study used qualitative methods and included two focus group sessions that addressed research questions 2., 2.a., and 2.b. Of the 26 participants who had expressed an interest in attending a focus group, only nine participants (5 Canadian and 4 Other than Canadian) agreed to attend (response rate of 0.73%), with three participants in the first session (Participants #1-3) and six participants in the second session (Participants #4-9). Of the n=9 participants, 2 were male and 7 were female. The average age of participants was 38.56 (SD=16.99). A breakdown of participant data for the focus groups is included in Appendix L. Each focus group lasted approximately two hours. The researcher created five major themes to guide the focus group data: (a) usefulness of Mindsight, (b) helpfulness of Mindsight, (c) Mindsight's cultural sensitivity, (d) ease of navigation, and (e) comfort discussing mental illness. Within each theme, subthemes were identified. These themes and subthemes aligned with the questions and sub-questions formulated by the researcher to guide the focus group discussions.

The findings from the focus groups are reported under the five main themes, with the themes **bolded** and the subthemes <u>underlined</u>. Direct quotes from participants are also included. In order to respect their privacy, participants were assigned a number (#1-9) at the beginning of the focus group. Table 20 outlines the focus group themes and subthemes.

Table 20: Themes and subthemes that emerged from focus group sessions with Mindsight participants

Themes	Subthemes	
Usefulness	Education value	
	Overall need for education	
	Gaining new knowledge	
	Having prior knowledge	
	Change in perception	
	Recommend resource	
	Information being reflective	
Helpfulness	Applicability in life	
	Cope with personal challenges	
	Help others to cope	
	Consult in the future	
	Recommend to person experiencing mental illness	
Cultural sensitivity	Ethnic visibility	
	Sensitivity of Mindsight	
	Mental illness in ethnicities	
Ease of navigation	Navigation	
	Recommendations to improve navigation	
	Presentation of information	
Comfort in discussing mental	Sensitivity of the issue	
health/illness	Emotional barriers	
	Stigma as a barrier	

Mental health comfort
• Reinforcement

### 5.2.1. Usefulness of the mental health education/information in Mindsight.

Participants had positive responses regarding the usefulness of information obtained from completing Mindsight. Participants discussed the <u>educational value</u> of Mindsight and the <u>overall need for such education</u> to address the stigma still associated with mental illness. Participant #6 noted that Mindsight was a primary source of mental health awareness education:

For me, I did Mindsight 2 years ago and that was my first encounter with any information of mental health. It was quite informative because the issue of stigma was huge. I know from my background, you don't just talk about mental illness, just because of the stigma. So going through the program actually opened my eyes to see mental health in another aspect.

Participants agreed that Mindsight was a good source of mental health/illness information. Participants also commented that they liked the differentiation of various mental illnesses and personalization of the videos. One example was Participant #5:

I found that the modules did a really good job of explaining that mental illness is more complex than you can recognize. It's not simple. The fact that there were ten modules; that did a very good job of explaining the big picture. So I agree with what others were saying. Provided a lot of perspective. What struck me too was the openness and honesty of the individuals, these are everyday individuals. In some cases, people we know, and it was heartwarming to hear them speak from the heart. And it was in parallel to a lot of what we are seeing right now generally in the media. There's more encouragement and honesty. It cast a very big light on a very complex topic.

### 5.2.1.1. What was something new that you learned?

Participants mentioned <u>the prevalence rates</u> of mental illness and the statistics noted in Mindsight. Participant #4 commented:

One of the things, I remember a lot of the stats were very surprising.

Participant #7 agreed and acknowledged being shocked by the statistics:

Basically, I did it for school. I am usually open-minded, so for me, I was a little bit aware of information even though I was informally educated. But I was shocked with the stats.

### 5.2.1.2. Was there information that you were already familiar with?

Five participants agreed they were <u>already familiar with some of the information</u> presented in Mindsight. Participant #7 specified:

The fact that mental illness can be present in anyone or anything. Like stuff like that, I knew.

Other participants thought that while the information presented was relatively new to them, it also helped to reinforce information. Participant #5 noted:

I don't know if I found the information to be material that I necessarily already knew. But it definitely reinforced a lot of the information for me, such as the relationship between mental illness and the issues of substance abuse. Things like that; it didn't come to a surprise to me that there was a relationship and in some cases between substance abuse and mental illness. Like reinforcement that it made sense.

### 5.2.1.3. How has your perception of mental health changed after reviewing this resource?

Participants differed in their response as to whether their <u>perception of mental health</u>

<u>changed</u> after completing Mindsight. Participant #5 thought Mindsight helped in gaining
a greater appreciation for the prevalence of mental illness and the challenges individuals
may be experiencing:

I think that going through Mindsight made me realize that this is more prevalent than I appreciated before. I think it has taught me to step back a little bit. We can't necessarily know what someone is going through so I think it has made me think of it in a bigger picture. When someone is having a bad day; you know there could be more to it. So it has definitely taught me to be less dismissive, to be a little more patient.

Participant #7 disagreed, indicating a previous understanding of mental illness, while also acknowledging that a duty to raise public awareness was heightened after completing

Mindsight.

Mine didn't really change, I was already open-minded. I know people that dealt with depression. I was already aware but I felt there was a greater need for me to bring awareness to other people like after seeing all the numbers. How people misinterpret the illness. But after Mindsight, I felt like it was my duty to bring awareness to other people.

## 5.2.1.4. Would you recommend this resource to individuals looking for information about mental health/illness?

Of the nine participants, eight agreed they would <u>recommend Mindsight</u>. One participant commented on the design being a reason to recommend Mindsight. Participant #2 indicated:

Absolutely. I think it is a good tool because of the way it is designed. So you have the videos, and real people, I imagine they are real, talking about issues and it helps you kind of understand perception. Like people's perception is their reality. For example, bipolar, talking about when it's dark, it's dark and it kind of gives you an idea of where to go for resources. And I think people would like the tool.

Participant #1, however, was only willing to recommend the resource to a select group of individuals:

It would probably depend on the person. Like relatively late 20s to early 40s.

When asked to explain their reasoning, Participant #1 indicated that Mindsight resembled Facebook and therefore did not look like a legitimate resource because of its simplicity.

5.2.1.5. Did you find the tabs to be reflective of major mental health issues?

Both group sessions agreed that the tabs and information under the tabs were reflective and informative of major mental health issues. One participant thought the variety of information was helpful in understanding various mental health challenges. Participant #2 noted:

Yeah I thought it covered all the ... definitely the major ones.

### 5.2.2. Helpfulness of the information to one's personal life.

### 5.2.2.1. How have you applied what you have learned in your everyday life?

The helpfulness of Mindsight was a significant factor in this study. Eight participants thought that Mindsight was applicable in both their personal and professional lives.

### Participant #6 commented:

I work with people with mental illness, I found from Mindsight, I don't have my body language like 'hey, the bipolar man', I don't taunt them into the disease. I first recognize them as people who have challenges, like you don't see someone and say 'oh that diabetic woman' you say 'the woman with diabetes'. So I changed my way of relating to them and I don't fold my arms. The way I stand, the way I talk with them, with the help of Mindsight, my posture, my words, even my height if they are seated, it is sometimes judgmental. And it has really been helpful.

### Participant #5 added:

One of the things that stands out for me is when you are talking to someone, to not ask them what's wrong but how can I help you. I thought that was really important. Like if someone has a cut, you can see that but with mental illness, you cannot necessarily detect that. Like if you ask a question that is more engaging or inviting, that's what I think about now. That's the biggest take away I had from Mindsight. From a professional standpoint, I see value and I'm trying to encourage my colleagues that you know this is probably one of the most important investments in a small amount of time that you will take to learn new things.

Participant #1 however, did not think Mindsight had been helpful as yet:

I think it's going to be a good resource if I ever need to come back to it. For now, I don't think so. I already knew a lot about mental illness.

## 5.2.2.2. How has this resource helped you to better cope with everyday struggles?

Six participants agreed that the information in Mindsight helped them in coping with everyday struggles. Participant #7 noted:

It made me realize that whenever I get frustrated, I stop and think like this is nothing compared to what someone with mental illness is going through, like I'm privileged to be healthy. Like what I have is not chronic. Kind of helped me to turn around and be patient. It helped me cope with little things every day.

### Participant #9 added:

Definitely for myself, a lot of depression during the winter time. It helps

me cope because it helps me remember what it is. Like with depression, it's a feeling that comes over you and to be able to put a name to it kind of helps. And it's something you know, to qualify it. Not for it to be you but something you deal with. I think the site helped to classify that.

## 5.2.2.3. How has this resource helped you to help someone else cope with everyday struggles?

None of the participants could specifically recall a scenario in which they were able to use the information in Mindsight to help someone else cope with everyday struggles; however, eight participants indicated that Mindsight helped them generally in making others feel more accepted and improved their ability to have conversations about mental illness. Participant #7 shared:

Just adding on, making people feel socially accepted. Like not to exclude people and to always talk in appropriate ways.

### Participant #3 added:

By listening to the people in those videos I have learned how to talk to friends of mine and I have never had any negative feedback from anyone.

### 5.2.2.4. Would you consult this resource if you encountered mental illness in the future?

All but one participant agreed they would <u>consult Mindsight</u> if they experienced a mental illness. Participant #1 responded:

Yeah I would go back to it. Especially for the support tab. Because of the variety.

### Participant #6 concurred:

Well one of the reasons I would consult Mindsight is because it's anonymous. Like I am faceless and am able to put myself in the shoes of people and be honest. Sometimes before face-to-face, you have to build trust. I know no one sees my face on Mindsight so it helps me.

### Participant #4, however, did not agree:

I probably would not. I think it's a great first resource or refresher

resource.

### 5.2.2.5. Would you recommend this resource to someone who may encounter mental illness?

All but one participant thought their <u>recommendation of Mindsight</u> would be dependent on the severity of a person's mental illness.

### Participant #2 noted:

I think I would. I'm not sure I would go directly there depending on the situation. Like if they need to go to a hospital. I do think it's tricky. How do you have that conversation?

### Participant #8 added:

I think it depends on the context. I may send them to a website to garner more information. It has an excellent breath of resources locally and in Canada. I think it's just situational. If I was looking to help somebody, it would be a good resource to make yourself aware of how the diseases present themselves, strategies to handle. It's definitely a good launching point.

Participant #4, however, would recommend Mindsight regardless of context:

I would recommend it. Because it has the different modules, the information is separated and presented in a wonderful way. You have a really great place to start.

### **5.2.3.** Cultural sensitivity of the information in Mindsight.

# Seven participants admitted they had not even thought about the ethnicity element and therefore had difficulty in elaborating further. A couple of participants did comment on

5.2.3.1. What aspects of Mindsight were sensitive/not sensitive to ethnicities?

the ethnic visibility including Participant #1 who stated:

I didn't notice it. Now that I'm looking again, it seems mostly to be white people.

### Participant #9 commented:

I do remember the interviews, I think it was a lawyer, she was a coloured

girl. I thought that was interesting because it's showing a small minority like Indian. She suffered from mental illness.

Eight participants agreed that having individuals from diverse backgrounds in the videos and pictures, as well as statistics outlining the prevalence of mental illness in ethnic groups would increase Mindsight's <u>cultural sensitivity</u>. All of the participants in the first group session thought there was no cultural representation in Mindsight; the views of participants in the second focus group offered the following insights:

### Participant #4 stated:

It probably would be beneficial for people from different backgrounds to see people like them to encourage them. I think there are two issues, are people being represented and will the material work for people from different backgrounds?

### Participant #5 added:

I agree strongly with these points. Mindsight needs to be something that whoever encounters it, they need to connect with it. If people are looking at it and think it doesn't relate to me, then yeah it needs to be revised so that everyone feels represented. You know for the major languages, especially in the GTA...that would be incredible.

# 5.2.3.2. What are the general perspectives of mental health in your ethnicity? Participants simultaneously agreed that mental health in any ethnic group is considered to be a very private matter and is therefore not a topic that is openly discussed. Participant #3 stated:

I had the same thing with my sister, like she wouldn't talk about it. And she finally did and it took a lot. In our family, I don't know anyone who had problems like I had. They wouldn't talk about it.

### Participant #6 further noted:

From my own background, from Nigeria...it's between two beliefs. But going back to 12-13 years, if someone happens to be off, or they notice something is not right mentally, they will be told they have offended the Gods and you are on the wrong side of the spirits. They don't see it as like diabetes; like that it needs to be treated. The person is locked out, they are sacrificed, to the point that, people won't get married to them. And now there is awareness and people are coming to understand but it is still

engraved in our system that people don't talk about it and that you know, the people have upset the spirits.

### Participant #7 also stated:

The thing is that people don't talk about it in my society. Because it's not socially accepted...I haven't been to my homeland for a long time and haven't had these discussions with my family. Like for a job interview, if someone has a mental illness, they will choose someone else. There's a lot of stigma, and opportunities that can get lost. And marriage opportunities as well. So people do not want to open up about it because there is like a fear. Society has not changed as much; they are turning a blind eye. Because people are not comfortable.

## 5.2.3.3. Do you think Mindsight can help change perspectives about mental health/illness in ethnicities that may not understand it?

Of the nine participants, eight agreed that if Mindsight could be updated to provide the information in different languages and to reflect the diversity of individuals (include more diversity in the pictures/videos), it may be appealing to ethnicities that do not understand mental health/illness. Participant #2 stated:

I mean it wouldn't hurt. Especially if you add a piece of self-assessment.

Participant #6 also stated:

If Mindsight can communicate clearly with them. It has to relate to them, they need to find a connection. You can't expect to talk to someone in Nigeria, and you are all English. The communication must appeal, they must be able to find a belonging and then they will be able to accept whatever message.

### 5.2.4. Ease of navigation through Mindsight.

Participants noted that Mindsight was a fairly easy tool to <u>navigate</u> through; however, Participant #1 did make a recommendation to improve the navigation:

For the most part yeah. Like there could be some stuff added to it though like the top, there could be something to bring you back to the homepage.

Participant #2 actually liked the technical set up of Mindsight by noting:

I liked the way it was set up with the tabs, especially if you wanted to reference something later, that was nice. I like the facts because they are helpful to think

'oh I am not alone.' And the videos with real people. And oh information is accurate and correct because that is important.

### Participant #4 also added:

Yes definitely. For example, because the issues I tend to see most frequently are depression and anxiety, I started with things I was least familiar with and I was able to do that with the tabs at the top. And I can focus on those areas and each session has the same format, so once you go through one, you can go through all of the tabs. And I also felt the information was presented in a number of different formats, which made it interesting and engaging I thought.

### 5.2.4.1. What aspects of Mindsight did you not like?

Participants agreed that they liked Mindsight, however, there were aspects they thought could be improved upon such as adding language options, more ethnic visibility, and addressing the potential time restraints. Participant #6 stated:

Just the language barrier.

### Participant #5 also added:

I didn't find anything that I disliked about it. But I know some of my colleagues have not been able to get it done, that I recommended it to. They haven't been able to find the two hours or however long it takes to complete it. And so, I don't know if there is a way around that...there is a lot of people who want to do this. People just get overwhelmed. It's not really criticism but I do find there are people who want to do it; the hurdle of time is just too long for them.

### 5.2.4.2. Was the information in Mindsight provided in a clear and concise way?

Again, participants were unanimous that the <u>information on Mindsight</u> was displayed in a clear way; however, two participants did have recommendations for potential updates.

Participant #5 noted the information was displayed clearly, mentioning:

I think so. I think for the most part, the videos were 1-2 minutes which was good. Because when they start getting longer, it really slows the process down. For the most part, that's perfect.

### Participant #9 also stated:

I thought it was user-friendly but it does have to be to some extent concise

so people will watch it. I don't mind taking the time to watch it because I did it for my course, but everyone has busy lives. Yeah it being concise, it was good.

### Participant #1 commented:

Yeah, just having the facts before the videos and what not would be better.

### 5.2.5. Overall comfort in discussing mental health/illness.

Participants agreed that although they all felt comfortable discussing mental health/illness, overall it is a <u>very sensitive topic</u> that is not usually openly discussed.

Participant #8 commented on the emotional barriers:

I don't know if it's uncomfortable. I think people are uncomfortable because they understand it is a sensitive issue, or they have their own issues. People, who don't have their own issues, might think they may say the wrong thing. I think that is a barrier they don't know how to speak about it. I think that's why Mindsight is such a good resource. I think we have movement to this is something we should talk about.

### Participant #1 added that stigma was a barrier:

Yes, so many people still are uncomfortable with it. Because people judge.

Participant #5 mentioned the importance of respecting one's privacy:

I think that most people are willing to talk about issues of mental health provided they do not feel they are violating someone else's privacy or comfort levels. Sometimes people want to keep their stuff private. But if ground rules are set, like you can't talk about it in a line at Tim Horton's. There are places to talk about it and some places you cannot.

### 5.2.5.1. Did Mindsight further your comfort level with mental health?

Participants were conflicted on whether Mindsight specifically furthered their <u>comfort</u> <u>level with mental health</u>. Of the six participants who discussed this question, Participants #1, #2 and #8 did not think it furthered their comfort level since they were already quite familiar with mental health/illness. However, Participants #3, #5, and #9 did agree that Mindsight had helped them to be more comfortable with mental health. Participant #3 noted:

I think there's good stuff in there, like with bipolar...I didn't know what that was. And now I know more about it. So I feel comfortable talking about it since I know about it. And know what I'm listening about.

### Participant #5 indicated Mindsight <u>reinforced</u> information:

I think it was helpful, it reinforced things that I thought I knew and it introduced a number of new concepts that helped connect dots and the interrelationships in mental illness.

### Participant #9 added:

It definitely furthered it, in terms of schizophrenia and drug abuse. I never thought about drug abuse on its own...definitely I learned stuff. I knew some before, but now I know more.

### **5.2.6.** Final thoughts.

Participants shared final thoughts, made recommendations for improving Mindsight and commented on the importance of having an educational resource. Participant #1 noted:

There's nothing about LGBT. Like with the suicide, the rate is really high and that's not reflected on here at all.

### Participant #5 added:

I don't know if Mindsight has changed...to add to the presentation to make it less 2007 and more 2015. There are ten very strong modules, but maybe there are sub things that can be added and also to keep an open mind that Mindsight in 2025 might need to be different again. One of the things we continue to deal with is the overwhelming amount of information that young people try to go through. They think they can handle it, but are they? Maybe there is a component to stress for a future version.

### **Chapter 6: Discussion**

This chapter will begin by discussing the demographics of the overall study participants presented in the results chapter. The chapter then discusses the remaining quantitative components: the AMIQ and the Evaluation of Mindsight survey in relation to the research questions and hypotheses. Finally, in the qualitative portion of this study, the focus group data will be discussed.

### **6.1. Demographic survey**

Providing detailed information about participant characteristics allows researchers to move toward a position of diversity, which recognizes that there may be psychological processes that manifest differently depending on the culture, race/ethnicity, and social lives (Hammer, 2011). These psychological processes may influence how a participant responds in a study. Data on the demographics from Mindsight certificate holders provided valuable information on who completes the online resource.

The demographic survey demonstrated a higher female participation rate than male participation rate (75 females, 30 males). This may reflect sex differences in who completed Mindsight or it could be that males were reluctant to participate in a study with emotionally complex questions (Affleck, Glass, & Macdonald, 2013). The average age of participants was 35.9 and ranged between 18-71 years.

The ethnicity of participants was another important variable in the demographic survey as the views of participants who self-identified as Other than Canadian versus the Canadian participants was a major focus for this study. With 42 of 105 participants indicating they identified with an ethnicity Other than Canadian (the third demographic variable), a larger portion of the sample was Canadian.

The majority of participants (99.05%) who completed Mindsight had some level of education with only one participant indicating they had completed less than high school. It should be noted that the majority of the participants had received at least a post-secondary education (75.24%). These results are to be expected since Mindsight has been widely promoted across the UOIT campus. The literature suggests that students often willingly participate in research projects (Liddell & Heuertz, 2011) which could also account for the high number of students (27.62%), who participated in this study. Thus, Mindsight users are primarily university educated individuals. However it is also important to determine if Mindsight is a useful resource for individuals without a university education since to be useful, a mental health/illness awareness resource needs to address the learning styles/needs of a wide variety of individuals and not just a select group. Participants were also asked to disclose their employment status. The majority (63.81%) of participants were employed.

Despite 67 participants indicating they were employed, a total of 71 participants chose an occupation category. This is most likely due to some students working while also going to school. The majority of participants indicated occupations in one of four categories: government/public services (22.53%), healthcare—medical services and products (16.90%), teacher/educator (26.76%), and other (16.90%). With Mindsight being developed at UOIT, it is not surprising that there was a fairly large representation of teachers/educators as well as government/public service workers.

In order to determine their previous experience with mental illness, participants were asked to disclose if they had personal contact with someone who had been diagnosed with mental illness. The majority of participants (79.05%) indicated they had.

Given that almost 80% of participants acknowledged having contact with someone who had a mental illness, it was not surprising that 82.86% of participants also indicated they knew someone who had mental illness or that they themselves had treatment for a mental illness. Also, because many of the participants were public service workers, teachers/educators or working in healthcare, it is possible that individuals in these positions have a greater opportunity to engage with varying groups of individuals and are therefore more likely to have interacted with someone living with a mental illness. In addition most mental illnesses develop between the ages of 18-24 years of age (WHO, 2014) and with this study's population confirming there is a high number of students who are usually around this age, the student population could account for the higher representation of individuals either knowing someone with a mental illness or living with a mental illness themselves. In order to be useful to a variety of people, Mindsight needs to reach more individuals, including those with less contact with individuals with a mental illness.

The demographic data provided insight into the backgrounds of participants who completed Mindsight; however, the low response rate suggests that the results need to be reproduced in order to confirm the representativeness of the sample.

# 6.2. Addressing research question #1 through the AMIQ: Mindsight certificate holders' views and attitudes towards people with a mental illness

The AMIQ collected data about participants' views and attitudes towards people with a mental illness and addressed research questions 1. and 1.a.: 1. "Do individuals who have completed Mindsight hold positive views and attitudes towards people with a mental illness?" 1.a. "Do individuals who have completed Mindsight and self-identify

with an ethnic group Other than Canadian share similar and/or different positive views and attitudes towards people with a mental illness when compared to individuals who have completed Mindsight and self-identify as Canadian?" The researcher hypothesized that individuals who have completed Mindsight hold positive views and attitudes towards individuals with a mental illness, regardless of self-identified ethnicities. The findings from the AMIQ did not support this hypothesis. The researcher also found no significant difference between AMIQ results from individuals who self-identify as Canadian and individuals who self-identify as Other than Canadian; although this is consistent with the stated hypothesis that these two groups do not have differences in views, future research is required to confirm the results. Though the AMIQ scores for the Other than Canadian participants indicated a more stigmatizing view of mental illness than the Canadian participants, the results were not significantly different. Chen, Kazanjian, and Wong (2009) reported that Canadians are usually less stigmatizing towards mental illness when compared to other ethnic groups such as Chinese Canadians. It may be that the Other than Canadian group in our study were interacting more with those who self-identify as Canadian, leading to more similarity in attitudes between groups.

There is growing awareness that mental illness is surrounded by negative attitudes and stigmas (Martensson, Jacobsson, & Engstrom, 2014). The results of the AMIQ were interesting with participants' scores reflective of the findings of other research studies that examined participants' AMIQ scores post participation in a mental health/illness awareness intervention. In a study conducted by de Alwis, Perera, Vasantha, Henegama and Fernando (2012), post mean scores of medical students were -1.90. Further Crapanzano, Vath, and Fisher (2014) found that for the heroin vignette, scores improved

from -6.00 to -4.50. Of the AMIQ results in this study, the mean for the Canadian and Other than Canadian groups was -3.00, a higher score (less stigmatizing) than what was found in some of the literature. Although scores from participants reflected post scores in other studies, the mean scores of participants in this study were still negative, indicating participants held stigmatizing views towards individuals with a mental illness.

A consideration for the AMIQ scores was the time lapse between participants' use of Mindsight and completion of the AMIQ. Since Mindsight was launched in 2010, there was a potential five year gap between a participant's use of the resource and this study. Brown and Bradley (2002) stress the need for continuous education in order to keep stigma levels of mental illness low. This indicated that although participants may have found the information on Mindsight to be useful, the time gap in reiteration of the knowledge and completion of the AMIQ could explain the mean scores being in the negative (more stigmatizing) range.

The researcher had initially hypothesized that individuals who had completed Mindsight shared positive views and attitudes towards people with a mental illness. The study's findings do not support this hypothesis. With an overall mean of -3.00 post completing Mindsight, it would have been interesting to compare these results to pre-test scores; however, since participants were recruited based on their completion of Mindsight, there was no opportunity for the researcher to conduct a pre-test.

6.3. Addressing research question #2 through the Evaluation survey and focus groups: Certificate holders' perceptions of Mindsight as an online mental health/illness awareness resource

Both the Evaluation of Mindsight survey and the focus groups collected data

about participants' perceptions of Mindsight and addressed research questions, 2., 2. a., and 2.b.: 2. "What are Mindsight certificate holders' perceptions of Mindsight as an online mental health/illness awareness resource?" 2.a. "Are individuals who have completed Mindsight applying what they have learned in their daily life?" 2.b. "What is the ease of use (ease of navigation, organization, and clarity of content) of Mindsight from the perceptions and experiences of the individuals who have completed the resource?" The researcher had hypothesized that individuals who had completed Mindsight were applying what they had learned in their daily lives and that Mindsight was a useable resource based on the perceptions and experiences of individuals who had completed the resource. The findings from the Evaluation survey and the focus group data were consistent with the researcher's hypotheses. With a total of n=90 participants completing the Evaluation of Mindsight survey and n=9 attending the focus groups, the researcher was able to obtain quantitative and qualitative data regarding the usefulness, applicability, and ease of navigation.

### **6.3.1.** Evaluation survey.

Results for the Evaluation survey were overall positive. Statement #1 and Statement #2 probed the usefulness of Mindsight in promoting mental health/illness awareness and asking participants if they better understood self-help strategies associated with mental illness. For both statements, at least 80% of participants (91.11% for Statement #1, 80% for Statement #2) agreed-strongly agreed. The positive response to Mindsight's usefulness suggests that the resource is effective in heightening awareness of mental health/illness as well. The results were also consistent with the literature which suggests that web-based resources provide a level of learning that most users find

satisfying due to the flexibility (Kassam et al., 2012). Also, since Mindsight provided information on self-help strategies, the researcher felt it was appropriate to probe whether these approaches were acknowledged by participants. Self-help strategies are simple things an individual can do on their own without the need for professional guidance (Morgan, Jorm, & Mackinnon, 2012). Self-help forums on the Internet for individuals with a mental illness, their relatives or those looking for additional resources are now common and often widely used (Bauer, Bauer, Spiessl, & Kagerbauer, 2013). By providing information and testimonials, individuals are able to gather knowledge that may be helpful to them if they are diagnosed with a mental illness. Also, hearing about individuals with similar issues can give a person searching for help a sense of being understood and encouragement to seek help (Bauer et al., 2013).

Knowledge of resources and application of use were also areas addressed by the Evaluation survey. While Statement #3 asked participants if they had a greater understanding of resources and supports that are available in the community, Statement #4 probed application of Mindsight knowledge in everyday life. Although a lower percentage than Statement #1 and Statement #2, over 70% (73.33% for Statement #1 and 70.46% for Statement #2) agreed-strongly agreed that Mindsight increased knowledge of resources and was applicable in daily life, indicating a positive response. The development and use of community mental illness resources for individuals offers a critical opportunity for accessibility and local resources to be utilized (Reupert & Maybery, 2011). In addition, the ability to apply knowledge learned can serve as a strong indicator that a learning tool was useful (Maurer, 2010). Maurer (2010)'s study also found that many individuals do not realize they implement learned behavior in their

everyday lives and do not realize how new knowledge has influenced behavior. This may also help to explain the undecided responses; some of the study's participants may not have been aware of or able to recall specific examples of resources in the community or having applied knowledge from Mindsight in their daily lives.

By probing if participants would recommend Mindsight and if the resource was valuable for future reference, the researcher was able to understand overall satisfaction of Mindsight users. Statement #5 of the Evaluation survey asked participants if they would recommend Mindsight to other individuals who are looking for a mental health/illness awareness resource, while Statement #11 probed Mindsight as a valuable mental health/illness resource for future reference. Responses were positive with over 80% of participants agreeing to recommend the resource (83.34%) and indicating it was a valuable resource for future reference (84.27%). Willingness to recommend is a measure of behavioural intentions and may better predict return to the resource than assessments of overall satisfaction (Lee, 2006). This is in contrast to Marinkovic and Senic (2012) who indicated that willingness to recommend is a crucial aspect of overall satisfaction and experience. Both findings are relevant to the evaluation of Mindsight and reasons for recommendation and future consultation. It is widely recognized that promoting mental health/illness is a key element in reducing stigma. However the literature is divided on what method of education is most appropriate for individuals to learn about mental health/illness. Lee (2006) demonstrated that learning on the Internet is a leading method in education since it offers flexibility and anonymity at little to no cost. However Gruendemann (2011) suggests that face-to-face learning is the best method for learning about mental illness. However, in agreeing to consult Mindsight in the future, participants are attesting to the ability to learn online.

The ease of navigation, different learning styles, and comfort with the web were all related aspects of Mindsight that were important for the researcher to understand in order to determine Mindsight current and future usage. While Statement #6 asked participants if they found Mindsight to be an easy resource to navigate through,

Statement #10 probed as to whether Mindsight was considerate of different learning styles and Statement #12 explored participants' comfort level with the web. The responses per survey question ranged from 70-90% of completed users in agreement that Mindsight had an ease of navigation (90%) and took into consideration different learning styles (70.45%), and that they were comfortable with the web (90%). According to the TAM, perceived ease of use is fundamental to the probability of system use. The perceived ease of use refers to the degree to which the prospective user expects the target system to be free of effort (Davis et al., 1989). Essentially, the easier to navigate, the more likely an individual is to use and perhaps repeatedly use the resource.

Kassam et al. (2012) also indicated that web-based platforms are ideal for delivering effective and accessible education. This is because a variety of learning techniques can be showcased on one platform, which the literature confirms is beneficial to maximize learning experiences (Meeuwisse et al., 2010).

This aspect of different theories of learning was important in the Evaluation survey as it aimed to verify if Mindsight was consistent with CFT. CFT explains that ill-structured domains can be understood as domains of knowledge that present a large degree of variation from case to case (Lima et al., 2004). In aiming to reach a variety of individuals, Mindsight enabled users to retain information through the use of a diverse set

of learning presentations. This is consistent with data by McMinn (2001) that demonstrated individuals benefit most from diverse learning experiences. In addition, probing participants' comfort level with the Internet was important to determine if comfort level was a factor in their willingness to consult and use Mindsight. Davies et al. (1989) indicated that the attitude toward use is a direct predictor of actual system use, an explanation provided by the TAM model. According to Meeuwisse et al. (2010), if there is too great a mismatch between the learning styles and strategies of a particular learner and the given learning environment, learning may be inhibited rather than enhanced.

Statement #7 asked participants if their completion of Mindsight had a positive impact on their attitudes towards individuals with mental illness. A majority of participants (83.14%) responded positively. Many research studies support the notion that education about mental illness can help to end stigma. For example, Banga (2014) explained that information helps break down the stigma surrounding mental health and enables individuals to recognize when to seek help. Rusch, Angermeyer, and Corrigan (2005) confirmed that educational resources on mental illness have proven to reduce stigmatizing attitudes among a wide variety of individuals. Conducting a study with a pre- and post- evaluation, as previously suggested, would yield further results to confirm the hypothesis that Mindsight positively impacted the participants who completed the resource.

Statement #8 and Statement #9 were created to explore the ethnic representation of Mindsight, as this was an integral portion of this study. Statement #8 focused on participants' perspectives of Mindsight in relation to ethnic representation while Statement #9 investigated Mindsight's usefulness for individuals from different

ethnicities. More than half of participants (61.11% for Statement #8 and 58.43% for Statement #9) found the Mindsight content to be representative of mental health challenges individuals from different ethnicities may experience and a useful resource for these individuals. However, these findings also suggest there is an opportunity for Mindsight to be updated to include more cultural representation. More research on cultural factors that surround ethnic groups and mental illness is needed in order to overcome this stigma.

### 6.3.1.1. Evaluation survey summary.

The Evaluation survey provided valuable insight into the perspectives of Mindsight certificate holders. The survey addressed research question 2., 2. a., and 2. b. With results consistently leaning towards the strongly agree to agree response options, the researcher's hypotheses that: 2.a. Individuals who have completed Mindsight are applying what they had learned in their daily life and that, 2.b. Mindsight was a useable resource based on the perceptions and experiences of the individuals who had completed the resource, were found to be true.

Also, there were a few questions that one to two participants chose not to respond to. The reasons for participants not responding are unknown. Including a comment section may have elicited further information and insights from participants. Overall, the responses from the Evaluation survey were encouraging and provided valuable information about Mindsight as an educational resource.

### 6.3.2. Focus groups.

The focus group data revealed significant insight into the perceptions of Mindsight from certificate holders and addressed research question 2., 2.a., and 2.b.

The researcher created five major themes to guide the conversation: usefulness of Mindsight, the helpfulness of content, the cultural sensitivity, ease of navigation, and comfort discussing mental health. The themes were created based on the research objectives and findings through the literature review. Focus groups provide information about a range of ideas and feelings that individuals have, as well as illuminating the differences in perspectives between groups of individuals (Rabiee, 2004). Further, through the group sessions, the researcher had an opportunity to be closer to the research topic through a direct and intense encounter with key individuals (Lane, McKenna, Ryan, & Fleming, 2001). Within focus groups, participants had the opportunity to validate or refute information given by others, the ability to seek direct clarification, and the ability to probe for deeper levels of information (Lane et al., 2001). The focus group session therefore creates a platform to speak about important topics, which can be empowering for a participant (Lane et al., 2001). This validation process can lead to the emergence of specific patterns and themes. These results are discussed below.

### 6.3.2.1. Theme: usefulness of Mindsight.

The majority of participants found Mindsight to be a useful educative resource. Evaluating Mindsight as an educative tool was an important aspect of this study as Mindsight was designed to provide information about mental illness. The educational value and overall need for education was expressed by participants when they indicated that more people need to be educated about mental illness in order to reduce the stigma. There are a number of factors affecting help seeking and these interact to determine when and how individuals seek help for mental illness (Reavley, McCann, & Jorm, 2012). The

most common factor associated with reluctance or refusal to seek help for mental illness is stigma and lack of education/ignorance. The need for education was also evident in participants detailing their shock when presented with mental health statistics. Many were surprised by the prevalence of mental illness and they saw this as an example of why individuals need to be educated.

Participants also mentioned that Mindsight added to the many things they already knew about mental health, thereby enhancing their knowledge. The confirmation of existing knowledge was a positive take away for participants who felt that reinforcement of mental health material was important in remembering and maintaining what they had learned. This finding was consistent with literature, for example, Rabiee (2004) found that enhancement can lead to better retention and application of knowledge. The usefulness of Mindsight was also exhibited in participants' willingness to recommend Mindsight to others. The variety of learning aspects offered in Mindsight proved to be a valuable asset that assisted participants in furthering their knowledge. With its different modes of presentation, the design of Mindsight was a positive aspect of the resource. The CFT described these different modes as features of more successful learning (Lima et al., 2004).

In contrast, one participant indicated their willingness to recommend would be dependent on whom the referral was for. Upon probing, the participant revealed that the simplistic layout of Mindsight was not authentic looking, comparing the resource to Facebook, a popular social media tool mainly for younger adults. Other participants also commented on the simplicity of the layout, however not in a negative way. Participants felt that the categorization of information was assistive in retaining what they were

reading, enabling them to focus on one mental illness at a time. Hearst (2006) confirmed that clustering the information provides clarity of content, where like information is sorted together. A general consensus from participants was that the tabs were reflective of major mental illnesses, providing an abundance of information that was easily accessible.

## 6.3.2.2. Theme: helpfulness of Mindsight.

Participants commented that they were able to apply information from Mindsight in both their personal and professional lives. Applying learned behaviour is a key indicator of product and learning success (Prince et al., 2007). Some participants were employed in the health sector and found the information to be helpful in their professional lives. Participants described how they were able to modify their behaviour, and even adjust their body posture, to be more open and less intimidating. Other participants found they were able to apply Mindsight in their personal lives by using positive language and recognizing individuals with a mental illness as people with an illness, instead of labeling them. In addition, many participants commented on how the information they gained assisted them to handle everyday struggles more appropriately. Some participants found that they were grateful for their own mental health after learning about the variety of mental illnesses. By being able to recall information and apply it, participants are demonstrating value in what they have learned (Prince et al., 2007). Other participants noted that the information helped them feel less alone, knowing that there were others with similar challenges. Being able to identify oneself as part of a group is an important coping strategy that creates a collective feeling for individuals (Mackereth, 2008). The importance of inclusion was mentioned by many participants who felt it was imperative to ensure others felt socially accepted. This was also a strategy participants

acknowledged using to make others feel less excluded.

Reusing material is an important gesture that notes usefulness (Littlejohn, 2003). All but one participant discussed consulting Mindsight in future. The individual who indicated they would not access Mindsight again elaborated that although it is a great first resource, other methods such as face-to-face therapy may be more beneficial. Other participants disagreed indicating that Mindsight consisted of a variety of information, such as the support tabs, which could prove useful in future. An important aspect that came up during this discussion was the topic of anonymity. It has been commonly reported that individuals may be reluctant to admit to symptoms suggestive of poor mental health when such data can be linked to them, even if their personal details are only used to help them access further care (Fear, Seddon, Jones, Greenberg, & Wessely, 2012). Therefore, it was expected that participants would discuss anonymity as an asset of Mindsight. This was also consistent with the literature review, which revealed that anonymity could counteract stigma, a barrier for seeking treatment.

# 6.3.2.3. Theme: cultural sensitivity of Mindsight.

Cultural sensitivity was the third theme that was created by the researcher to generate discussion. Participants were not in complete agreement as to whether the information in Mindsight was culturally representative. Six participants felt that there was little cultural representation in Mindsight, whereas others felt the individuals in the videos represented different ethnicities. Franz et al. (2014) reported that mental illness tends to be more prevalent in ethnic populations. When the researcher tried to generate a discussion about which aspects of Mindsight were sensitive/not sensitive to ethnicities to probe participants' previous claims that greater ethnic visibility was needed, participants

in the first focus group indicated that Mindsight did not have any cultural representation. Participants in this session commented that individuals in the videos in Mindsight were predominantly Caucasian-Canadian. Participants also indicated that the material in Mindsight would have to be more relatable to varying groups of individuals in order for them to be more accepting of Mindsight's information. Zuvekas and Fleishman (2008) identify that ethnic individuals need to feel valued and find value in mental health services. If they do not feel appropriately represented, they will seek treatment in cultural healing services that cater to them specifically (Zuvekas & Fleishman, 2008).

Participants did acknowledge that there are repercussions for individuals within their ethnic groups who self-identify as having a mental illness. Anglin, Link, and Phelan (2006) confirm that Caucasians are frequently represented in research, causing ethnic groups to go unnoticed. It was important for the researcher to identify if completing Mindsight would have the potential to help change these stigmatizing ethnic perspectives of mental illness. Participants indicated that if Mindsight could be updated to include more cultural representation and could communicate clearly with ethnic individuals, then the resource would be of increased benefit.

### 6.3.2.4. Theme: ease of navigation of Mindsight.

The ease of navigation was the fourth theme to emerge in the group sessions. Participants' perceptions of the navigation of Mindsight were an important aspect of this study. The TAM suggests that ease of navigation is a predictor of system use (Legris et al., 2003). Participants in both group sessions found that Mindsight was an easy tool to navigate through. Consistent with the ease of navigation, participants commented that they liked the technical set up of Mindsight, which promoted usability, again consistent

with the TAM. Participants in the second group session added that with the format design, it was relatively easy to follow once you had completed one tab of information. Participants also shared that the information appeared accurate, which was an important feature of the resource. Adams (2010) confirms this finding by demonstrating that online accuracy of information is a key element in use and re-use that individuals look for when seeking knowledge online.

Participants were in agreement that the information in Mindsight was presented in a clear way. Qureshi et al. (2012) found that the presentation of information is also an important determinant of online content because if the content is presented in a clear and concise way, then individuals are more likely to access the information. However, similar to the discussion regarding the cultural representation, participants acknowledged that with Mindsight only being offered in English, it was creating a barrier for ethnic individuals who may want to complete the resource but would be unable to. Qureshi et al. (2012) supported this finding by indicating that language is one of the most common barriers for individuals accessing information online. For individuals who may struggle with English, an abundance of information is ultimately not available as many resources do not offer translations or information in other languages (Qureshi et al., 2012).

Acknowledging this language barrier and improving it could lead to more ethnic usage of Mindsight.

### 6.3.2.5. Theme: Comfort in discussing mental health/illness.

The fifth theme of the group session was the comfort of participants in discussing mental health/illness. The sensitivity of conversation surrounding mental illness is a constant impediment to seeking and receiving the requisite care necessary for individuals

who need it (Theurer, Jean-Paul, Cheyney, Koko-Ljunberg, & Stevens, 2015). The focus group participants unanimously agreed that they felt comfortable discussing mental illness; however, they also felt that it was a sensitive topic that is usually not openly discussed. Participants shared that by emphasizing the sensitivity of mental illness, barriers were being created which perpetuate stigma associated with mental health. This finding was consistent with Corrigan and Watson (2002), who demonstrated that by treating individuals with a mental illness differently, society is succumbing to stigmatizing attitudes that individuals with a mental illness need specialized treatment. Participants agreed that Mindsight helped to broaden their understanding of mental illness since it discouraged judgment and helped them to be more open to individuals with a mental illness.

The focus group participants felt that due to the stigma, many individuals do not want to violate someone else's privacy or comfort levels by discussing mental illness. Participants also noted that it is unlikely for individuals to discuss mental illness in public areas for fear of stigmatization. Michaels and Corrigan (2013) confirmed that because of the stigma associated with mental illness, individuals do not want to identify themselves with the illness as there could be damaging repercussions. The stigma of mental illness has been shown to diminish work and living opportunities and therefore individuals may choose to keep their mental illness private so as not to lose out on opportunities (Michaels & Corrigan, 2013). However, participants felt that after completing Mindsight, they were more willing to talk about mental illness. Many felt that Mindsight educated them and helped them realize that talking about mental illness could help break down the barriers of stigma.

There were however, some participants who felt conflicted about whether Mindsight specifically furthered their comfort level with mental illness. Despite this, all participants agreed they were able to take away some knowledge from the resource. Due to the time lapse since completing Mindsight, it was not surprising that many participants were unsure of the degree to which Mindsight had influenced them. Participants in both focus groups seemed comfortable in discussing mental illness and shared an ease of interacting with individuals with a mental illness. This was not surprising as 79.05% of participants indicated personal contact with an individual with mental illness and 83.02% indicated in the demographic survey that they had contact with someone who had received treatment for mental illness. Participants also shared that Mindsight reinforced some information and introduced a number of new ideas. This was a positive take away that demonstrated Mindsight's ability to impact individuals. Alexander and Link (2003) confirmed that the reinforcement of information can be just as powerful as the education itself.

## **6.3.3.** Final thoughts on the focus groups.

During the group sessions, it appeared that due to a time lapse between their use of Mindsight and the focus group sessions, some participants were unable to provide specifics about the applicability of Mindsight. However as participants began to recount their experiences and likes/dislikes, it was obvious to the researcher that Mindsight had impacted the individuals more than they initially thought. The overall impression was that Mindsight was a valuable resource that provided insight and knowledge about mental illness. Participants, although expectedly timid at first, were soon keen on sharing their perceptions of the Mindsight resource. When asked if participants had any final thoughts

prior to ending the discussion, one participant indicated that Mindsight should include content on the lesbian, gay, bisexual, transgender (LGBT) community, as mental illness rates are often high in this stigmatized group. Mayberry (2013) confirmed that many individuals, especially youth, who identify as LGBT often experience various mental illnesses such as depression, suicidal thoughts, and drug use due to the stigma associated with their identification. Therefore, the notion that more information on this topic should be included in Mindsight is reasonable and could benefit many who need support.

Another participant suggested that the resource be constantly updated to reflect current statistics and strategies for relieving stress. Participants in both group sessions agreed with these suggestions and thought they could only help Mindsight and enable it to be the standard for mental health/illness awareness information.

# 6.4. Addressing research question #3 through the ethnic breakdown of the Evaluation survey: self-identified Canadian versus self-identified Other than Canadian perceptions of Mindsight

Exploring the perceptions of Mindsight of Canadian and Other than Canadian participants was related to research question 3: "Do individuals who have completed Mindsight and self-identify with an ethnic group Other than Canadian, share similar and/or different perceptions of Mindsight as a mental health/illness awareness resource when compared with individuals who have completed Mindsight and self-identify as Canadian?" The researcher had hypothesized that the two groups would share similar views of Mindsight, which was supported by the participants' responses to the Evaluation survey. The majority of responses were positive and there was little difference noted between the Canadian and Other than Canadian groups. This is in contrast to Hofstede's

CDT, which hypothesizes that differences in opinion exist between ethnic and non-ethnic groups.

In the Evaluation survey, Canadian and Other than Canadian participants both agreed that Mindsight was a useful resource. This supports Clegg, Hudson, and Steel (2003), who indicate that the power of globalization and the effect of technology result in the usefulness of e-learning being inevitable, regardless of cultural differences. However, many research findings including Lee (2012) reported that understandings of mental illness can be low in ethnic groups, where community harassment prevents discussion of mental illness and self-help strategies. Gilmour (2014) also suggested that Canadians have a strong understanding of mental illness and self-help strategies. However, when comparing responses from Statement #2 that discussed a greater understanding of mental illness and self-help strategies, both Canadian and Other than Canadian participants responded similarly. In relation to self-help, Statement #3 asked the participants if they had a greater understanding of resources within the community after using Mindsight. Both Canadian and Other than Canadian groups agreed that they did, which is in contrast to the literature which found a disparity between ethnic and non-ethnic groups regarding mental health service awareness and utilization rates (Cho, Kim, & Velez-Ortiz, 2014). Ethnic groups often do not use many services available to them, perhaps because the services do not meet their needs, which is a conclusion drawn from ethnic groups having the highest rates of unmet mental health care needs (Cho et al., 2014). Since Canadian groups utilize services more often than ethnic groups, it is interesting that both groups indicated a similar understanding of resources in Mindsight, when there are differences in use. This similarity in understanding of resources could be attributed to Mindsight being

a source of learning, which Chao and Otsuki-Clutter (2011) indicate is important, despite the self-identification of an individual (Chao & Otsuki-Clutter, 2011).

The similarity in responses continued when both Canadian and Other than Canadian participants indicated they would recommend Mindsight to other individuals. This finding is in contrast to the literature that discusses the differences between mainstream and ethnic groups, and reports that mainstream groups are more likely to recommend services and resources than are ethnic groups (Smith et al., 2007). This is most likely due to the notion that mainstream groups, or in this case Canadians, are more likely to use services associated with mental illness. However both the Canadian and Other than Canadian participants in this study agreed that they would recommend Mindsight, with little difference in responses found between the two groups.

As reported earlier, most participants agreed that they could easily navigate through Mindsight. Although, available literature reports that Canadian groups are more inclined to report comfort with web navigation over ethnic groups (Heerwegh & Loosveldt, 2008). Im and Chee (2008) also indicated that ethnic groups, with practice, reported high levels of comfort using the Internet. The similarity in responses for the ease of navigation of Mindsight was expected since the format of Mindsight was developed to provide a range of learning experiences (i.e. through facts, videos, resources, pictures). However, Trofimovich and Turuseva (2015) reported that ethnic individuals may have a greater difficulty learning, if the material is not in their first language. This reveals that language could be a learning barrier for ethnic individuals wanting to access Mindsight; a finding that is significant, as much of the current literature does not mention language barriers when discussing navigation of an online mental health/illness awareness

resource. This finding was also confirmed in the focus group sessions when participants identified language barriers as being a shortfall of Mindsight.

The Evaluation survey also probed Mindsight's influence on attitudes towards mental illness. The impact of education on both ethnic and mainstream groups has been found to be positive regardless of ethnic self-identification (Gulati, Das, & Chavan, 2014). The Other than Canadian and Canadian results of Statement #7 demonstrated a potential significant contribution to the literature since many studies, including one by Ghuloum and Bener (2010), found ethnic groups have poor attitudes towards mental illness. With the Canadian and Other than Canadian participants in this study demonstrating a similar response pattern and potential change in mental illness perceptions after completing Mindsight, results indicated that education can benefit any group, regardless of ethnicity.

## **Chapter 7: Strengths and Limitations**

### 7.1. Strengths

The benefit of a mixed methods approach is that the data is rich and multifaceted, allowing for integration of a variety of methods (Yardley & Bishop, 2015). By conducting a mixed methods study, the researcher was able to collect comprehensive data about the participants' perceptions of Mindsight as a mental health/illness awareness resource. Results from the quantitative phase of this study seemed to be consistent with findings from the qualitative phase. Though response rates were low, the number of participants was adequate to conduct both phases of this study.

Given the surge in Internet use in recent years, this study shed light on a web-based resource that provides valuable education about mental illness. Canadians have been found to consistently use the Internet for long periods of time to research information (Dickinson & Ellison, 2001). Vakkari (2012) determined that individuals equate information learned on the Internet to the information provided by their physicians. Knowing this, it was important for this study to evaluate Mindsight, a resource that provides a variety of educational materials related to mental health/illness.

Lastly, this study promoted mental health education, a valuable strategy to decrease stigma associated with mental illness. In most communities, the importance of mental health and how to promote it are poorly understood (Herrman, 2001). Also, a balanced approach to promoting mental health, preventing mental illness and treating those affected is recommended by experts and governments in a number of countries (Herrman, 2001). Any study that addresses the issue of stigma and mental illness is a valuable contributor to the literature and has the potential to educate a wide variety of

individuals.

# 7.2. Limitations

Although this study contained valuable information and contributed to the literature there were limitations that should be considered. The researcher understood that any information gained from participants was subjective as the participants were not observed applying Mindsight, rather they were reporting it. Additionally, there was a concern that participants had not completed or consulted Mindsight within the past six months and may respond according to how they thought the researcher would want them to. In future, it may be beneficial to include a section that probes last use of or consultation with Mindsight in order to understand how familiar participants are with the resource. The initial objective of this study was to have both Canadian and Other than Canadian groups appropriately represented so that inferences could be drawn from their perceptions. Hammer (2011) indicated that it is imperative to include diverse population groups in study samples so that findings can be generalized to a wide variety of individuals. Unfortunately, due to an oversight in sending out the email invitations, instead of the 2,500-3,000 Mindsight certificate holders being contacted, only n=1235 of these individuals were invited to participate in this study. Subsequently, the response rate was less than 10%, which resulted in the researcher having a limited number of ethnic participants. Recently in research, there is a trend of low response rates with many studies involving online surveys, which now are having response rates below 20% (Nulty, 2008).

The researcher had intended to separate self-identified Other than Canadian and self-identified Canadian individuals into two groups in order to compare and contrast their perceptions of Mindsight and mental health/illness within the focus group sessions.

However, given that only n=9 participants attended the focus groups, this was not feasible. An automatic response is to equate low participation rates with poor data quality (Rindfuss et al., 2015). Given that more than 1,000 individuals were contacted to participate in this study, the researcher was still able to collect quality data from more than 80 individuals for Phase One of the study. In future, it may be beneficial to include some sort of incentive for participants in order to increase response rates. Although the researcher did raffle a pair of movie tickets for participants who participated in Phase One and Phase Two, this was done more so as a thank you to participants for their study participation, rather than as an incentive.

Another limitation of this study was the survey method used to collect data in Phase One. Simple Survey was recommended to the researcher by a UOIT staff member as being a prominent and easily accessible tool to collect large amounts of data. While this is true, the Simple Survey website did have restrictions that impacted this study. The choice of survey tool remains an important consideration of data collection as it can either simplify the process or make it more difficult (Rea & Parker, 2014). The structure of the questionnaire prohibited the researcher from properly displaying the AMIQ for participants. As a result, all survey response options were included for each question instead of the standard strongly agree-strongly disagree for questions #1-3 and very likely-very unlikely for questions #4-5. This presentation format was confusing for some participants and they responded incorrectly using all options, instead of the ones specified by the researcher. This limitation caused a decrease in eligible responses for the AMIQ; however, the decision was still made to exclude the data in order to preserve the integrity of the results. The Simple Survey tool also made it difficult for the researcher to correlate

the responses of participants for each of the three questionnaires. The researcher had to manually match the Internet protocol (IP) addresses of participants to their responses in order to correlate their data. This process was challenging and time consuming. In future, it would be beneficial to research available survey tools more thoroughly before making a final decision about which one to use.

Lastly, several of the participants in the focus group sessions indicated that it had been some time (up to five years) since they had consulted Mindsight. This limited participants' ability during the focus group to engage in a detailed discussion of their perceptions on specifics of Mindsight in the group discussions. Also, it was more than likely that this time lapse impacted participants in Phase One as well. Koutstaal (2006) demonstrated that information must be maintained in order for individuals to remember it. If there is a knowledge gap even three months after information is learned, individuals can have difficulties recalling what they have learned. Although the researcher did have a laptop with the Mindsight resource open for viewing purposes at both group sessions, it may have been challenging for participants to recall the specific examples of the influence Mindsight had on them at time of completion. In future, clearly outlining to individuals that they should familiarize themselves with Mindsight prior to study participation is recommended.

Therefore the researcher acknowledges that there were limitations in this study that impacted the results. Measures were taken to address some of the problems with data collection to decrease the possibility of biased data. Due to these limitations, it is unlikely that this study's results can be generalized beyond the study population.

# **Chapter 8: Thesis Conclusions**

## 8.1. Summary

This thesis presented a mixed methods approach to an evaluation of the Mindsight resource. The objective of study was to evaluate Mindsight from the perspectives of certificate holders who had completed this resource. The research questions included:

- 1. Do individuals who have completed Mindsight hold positive views and attitudes towards people with a mental illness?
  - a. Do individuals who have completed Mindsight and self-identify with an ethnic group Other than Canadian share similar and/or different positive views and attitudes towards people with a mental illness when compared to individuals who have completed Mindsight and self-identify as Canadian?
- 2. What are Mindsight certificate holders' perceptions of Mindsight as an online mental health/illness awareness resource?
  - a. Are individuals who have completed Mindsight applying what they have learned in their daily life?
  - b. What is the ease of use (i.e. the ease of navigation, organization and clarity of content) of Mindsight from the perceptions and experiences of the individuals who have completed the resource?
- 3. Do individuals who have completed Mindsight and self-identify with an ethnic group Other than Canadian share similar and/or different perceptions of Mindsight as a mental health/illness awareness resource when compared with individuals who have completed Mindsight and self-identify as Canadian?

The literature review of this study exposed gaps in the literature in two main categories: mental health and the Internet. The review (Chapter Two) also shed light on the diversity and stigma in mental health, revealing the positive impact that mental health/illness awareness can have. In addition, the Internet was demonstrated to be a prominent source of information that is easily accessible to individuals and provides a level of anonymity that can be very appealing. It was also reported that educational tools need to take into account the different learning styles of individuals, in order to have the most significant impact. Lastly, Chapter Two included a description of Mindsight that introduced the resource as a solution to the gaps in educative resources and mental health learning.

Three theoretical frameworks were chosen to guide this study by helping to inform the Evaluation Survey and focus group guiding questions; the Cognitive Flexibility Theory (CFT), the Technology Acceptance Model (TAM), and Hofstede's Cultural Dimensions Theory (CDT) were discussed in Chapter Three. The CFT was found to be useful to demonstrate the learning style differences of participants and how a wide variety of learning methods can be beneficial to individuals. The TAM was used to evaluate the technical set up and ease of navigation of Mindsight that predicted system use and reuse. Lastly, Hofstede's CDT was used to explain any different perceptions between Canadian and Other than Canadian participants.

A mixed methods approach was chosen as the research methodology of this study and is described in Chapter Four. Using a mixed methods approach, this study consisted of two phases. Phase One was quantitative using three questionnaires/surveys to collect demographic information, participants' views towards mental illness, and their

perceptions of Mindsight. Phase Two consisted of two focus groups to collect qualitative data. Statistical analysis was conducted in Phase One to determine if a significant difference in attitude towards people with a mental illness existed between Canadian and Other than Canadian participants. Data in Phase Two was analyzed using NVivo to create themes, categories and subcategories.

The results of this study were discussed in Chapter Five. Statistical tests found no difference between Canadian and Other than Canadian participants with regards to attitudes towards individuals with a mental illness. Over 80% of participants found Mindsight to be a useful resource that is easy to navigate through and would recommend it to other individuals looking for a mental health/illness awareness resource. Only 61% of participants agreed that Mindsight is a culturally representative resource; the remaining participants were undecided or disagreed.

Similarities and differences between participants who self-identified as Canadian and participants who self-identified as Other than Canadian were highlighted in Chapter Six. The discussion section demonstrated the positive trend in responses in which Mindsight users detailed their experiences with mental health/illness and Mindsight in the Evaluation Survey and the focus groups. There were only minor differences between how the Canadian and Other than Canadian groups viewed Mindsight, indicating a similar pattern of perceptions, in line with the researcher's hypothesis. This chapter also discussed participants' recommendations for modifying Mindsight in the future, including adding information regarding the lesbian, gay, bisexual and transgender (LGBT) community, as well as including a variety of languages in order for individuals whose first language may not be English to be able to complete Mindsight.

Strengths and limitations of this study were discussed in Chapter Seven. Strengths included the mixed methods approach, enabling a variety of data to be collected in a relatively short amount of time. In addition, through evaluating a mental health/illness resource, this study promoted mental health education and contributed to the literature in its discipline. Limitations included a smaller sample size than expected due to an oversight in data collection. Still, data was collected from over 80 individuals in Phase One. Also, the AMIQ used in Phase One was not used in total which, with only one vignette selected, may have contributed to some of the participants' stigmatizing views. Lastly, a time lapse between their completion of Mindsight and their participation in this study was revealed by participants, which limited their ability to discuss specific experiences with mental health/illness and Mindsight.

#### 8.2. Future Research Recommendations

The researcher developed several recommendations for future research.

- Recruit a larger sample size that would be representative of a wider variety of individuals.
- Recruit participants who have completed or consulted Mindsight within the last 6
  months to increase the likelihood that they can accurately recall the resource and
  confidently offer their perspectives.
- 3. Pre-test the AMIQ using only one of the statements in the questionnaire (prior to evaluating a mental health/illness awareness interventions) to determine the impact this modification may have on assessing individuals' attitudes towards mental illness.

- 4. Conduct further evaluations of Mindsight after any recommended changes are made to determine the impact of the changes and identify any additional modifications that may be beneficial.
- 5. Compare Mindsight with other available mental health/illness awareness resources to gather additional data on the strengths and limitations of this resource and contribute further to the web-based mental health literature.

By implementing these recommendations, future research studies will be strengthened and contribute further to the current literature.

#### 8.3. Conclusion

This study embraced a diverse population sample and was able to effectively evaluate the web-based mental health/illness resource, Mindsight, from the perspectives of certificate holders. The results of this study did not support the researcher's hypotheses that individuals who have completed Mindsight hold positive views and attitudes towards individuals with a mental illness, regardless of self-identified ethnicities. While it is possible that the participants' attitudes towards individuals with a mental illness improved after they completed Mindsight, further research including pretesting of participants' attitudes would be required to confirm this. The results of this study were, however, consistent with the researcher's hypotheses that Mindsight users share positive perspectives of the resource (applicability; usability) regardless of their self-identified ethnicity. Given that mental illness is considered a sensitive topic in society, this study also promoted mental health education by evaluating a resource designed to help minimize the stigma associated with mental illness, a major barrier for individuals seeking treatment and support.

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### **Glossary of Terms**

### **Attitude**

A predisposition to respond to a certain object either in a positive or in a negative way (Di Martino & Zan, 2010).

## **Attitude to Mental Illness Questionnaire (AMIQ)**

The AMIQ is a short form of the Community Attitudes toward Mental Illness (CAMI) scale that has been shown to be both a valid and reliable tool for measuring attitudes toward mental illness (Taylor & Dear, 1981).

## Bipolar mood disorder

Typically consists of both manic and depressive episodes separated by periods of normal mood. Manic episodes involve elevated or irritable mood, over-activity, pressure of speech, inflated self-esteem and a decreased need for sleep (WHO, 2012).

# **Cognitive Flexibility Theory (CFT)**

Derived from constructivist theories (constructing own knowledge), subsumption theory (new and previously learned materials should be integrated) and genetic epistemology (learning by adapting learnt behaviour to new situations) (McMinn, 2001).

#### Culture

The totality of socially transmitted behavioural patterns, arts, belief, values, customs, life ways, and all other products of human work and thought characteristics of a population of people that guide their world view and decision making. These patterns may be explicit or implicit, are primarily learned and transmitted within the family, are shared by most members of the culture, and are emergent phenomena that change in response to global phenomena. Culture is learned first in the family, then in school, then in the community

and other social organizations such as the church (Purnell & Paulanka, 2003, p.3).

#### **Dementia**

Clinical diagnosis requiring new functional dependence on the basis of progressive cognitive decline (Cunningham, McGuinness, Herron, & Passmore, 2015).

## **Depression**

In its typical depressive episodes, the person experiences depressed mood, loss of interest and enjoyment, and reduced energy leading to diminished activity for at least two weeks (WHO, 2012).

#### **Discrimination**

Occurs when stigmatization is acted on by concrete behaviours such as exclusion, rejection, or devaluation. Discrimination can take place on a personal level or be enacted through, societal and structural inequalities (Abbey et al., 2011).

# **Diversity**

All characteristics and experiences that define each of us as individuals (Kapoor, 2011).

# E-learning

An approach to teaching and learning that is based on the use of electronic media and devices as tools for improving access to communication and that facilitates the adoption of new ways of understanding and developing learning (Sangra, Vlachopoulos, & Cabrera, 2012).

### **Ethnicity**

A sharing of common culture, which may be based on a combination of factors such as language, religion, national identity, customs, social and/or political position within a country's social system (Clarke, Colantonio, Rhodes, & Escobar, 2008).

## **Focus groups**

A form of group interview where the aim is to understand the social dynamic and interaction between the participants through the collection of verbal and observational data (Redmond & Curtis, 2009).

## **Help-seeking**

In relation to mental illness, the act of proactively accessing professional and/or personal services to receive assistance to overcome or manage the illness (Gulliver, Griffiths, & Christensen, 2010).

## **Hofstede's Cultural Dimensions Theory (CDT)**

Identifies five dimensions: power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation which are helpful in determining cultural similarities and differences (Shi & Wang, 2011).

#### **Ill-structured domains**

Understood as domains of knowledge that present a large degree of variation from case to case (Lima et al., 2004)

#### **Internet**

A global network of computers linking a network of data and information (Shaw & Black, 2008).

#### Mental health

A state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community (WHO, 2005, p. 2)

#### Mental illness

Conditions that affect cognition, emotion, and behaviour (Manderscheid et al., 2010).

## Mindsight

Mindsight is a web-based mental health resource designed to promote mental health awareness and decrease stigma by educating individuals about common mental illnesses, support strategies, treatment options, and available resources (Mindsight, 2010).

#### Mixed methods

A type of research in which a researcher or team or researchers combines elements of qualitative and quantitative research approaches (e.g., the use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration (Johnson, Onquegbuzie, & Turner, 2007, p 123).

## **Neuropsychiatric disorders**

A grouping that includes neurological disorders and dementia as well as mental and substance use disorders (Whiteford et al., 2013).

#### Perceived ease of use

Refers to the degree to which the prospective user expects the target system to be free of effort (Davis et al., 1989).

#### Perceived usefulness

The prospective user's subjective probability that using a specific application system will increase his or her performance within an organizational context (Davis et al., 1989).

#### **Public stigma**

What a naïve public does to the stigmatized group when they endorse the prejudice about

that group (Corrigan, 2004).

#### Qualitative research

An inductive approach is used to advance and build theory in which the researcher begins with specific observations about an area or question of interest; these observations lead to the identification of patterns upon which some tentative hypotheses are formulated that are developed into a theory (Barczak, 2015).

#### **Quantitative research**

A deductive approach is used in which the researcher identifies a theory that relates to the topic being studied, develops hypotheses based on this theory, and then tests those hypotheses with data that either confirms the hypotheses or not (Barczak, 2015).

## Schizophrenia

A heterogeneous cluster of psychotic conditions characterised by positive (delusions, hallucinations) and negative (blunting of affect, avolition) symptoms, disorganized speech and behaviour, as well as mood (depressive) and cognitive impairments (Swingler, 2013).

## Stigma

Any attitude, trait, or disorder that marks an individual as being unacceptably different from the 'normal' people with whom he or she routinely interacts, and elicits some form of community sanction (Abbey et al., 2011).

## **Self-stigma**

What members of a stigmatized group may do to themselves if they internalize the public stigma (Corrigan, 2004).

#### Substance use disorder

Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs. Psychoactive substance use can lead to dependence syndrome - a cluster of behavioural, cognitive, and physiological phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state (WHO, 2015).

## **Technology Acceptance Model (TAM)**

Examines the mediating role of perceived ease of use (E) and perceived usefulness (U) in their relation between systems characteristics (external variables) and the probability of system use (an indicator of system success) (Legris et al., 2003).

## **Appendix A: REB Approval**



#### RESEARCH ETHICS BOARD OFFICE OF RESEARCH SERVICES

Date: October 23rd, 2014

To: Alicia Fernandes (Graduate PI) and Wendy Stanyon (Supervisor)

From: Bill Goodman, REB Chair

**REB File #: 14-012** 

Project Title: An evaluation of an online mental health awareness resource:

**Perspectives of Mindsight Certificate Holders** 

**DECISION: APPROVED** 

EXPIRY: October 23<sup>rd</sup>, 2016

The University of Ontario, Institute of Technology Research Ethics Board (REB) has reviewed and approved the above research proposal. This application has been reviewed to ensure compliance with the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2) and the UOIT Research Ethics Policy and Procedures.

Please note that the (REB) requires that you adhere to the protocol as last reviewed and approved by the REB. Always quote your REB file number on all future correspondence.

Please familiarize yourself with the following forms as they may become of use to you:

- Change Request Form: any changes or modifications (i.e. adding a Co-PI or a change in methodology) must be approved by the REB through the completion of a change request form before implemented.
- Adverse or unexpected Events Form: events must be reported to the REB within 72 hours after the event occurred with an indication of how these events affect (in the view of the Principal Investigator) the safety of the participants and the continuation of the protocol. (I.e. un-anticipated or un-mitigated physical, social or psychological harm to a participant).
- **Research Project Completion Form:** must be completed when the research study has

completed.

➤ Renewal Request Form: any project that exceeds the original approval period must receive approval by the REB through the completion of a Renewal Request Form before the expiry date has passed.

All Forms can be found at <a href="http://research.uoit.ca/faculty/policies-procedures-forms.php">http://research.uoit.ca/faculty/policies-procedures-forms.php</a>.

REB Chair	Ethics and
Dr. Bill	Compliance
Goodman, FBIT	Officer

University of Ontario, Institute of Technology 2000 Simcoe Street North, Oshawa ON, L1H 7K4 PHONE: (905) 721-8668, ext. 3693

### **Appendix B: Consent Form for Phase One**

Participant Information Sheet and Consent Form for Web-based Questionnaires

Title of study: An Evaluation of an Online Mental Health Awareness Resource: Perspectives of Mindsight Certificate Holders

Principal investigator: Alicia Fernandes, Master of Health Sciences student.

Research Supervisor: Dr. Wendy Stanyon, Faculty of Health Sciences.

### What is the purpose of this study?

The objective of the first phase of the study is to collect 1. demographic data of participants, 2. participants' perceptions of Mindsight, and 3. self-identified attitudes toward mental illness. Participants will be sent an invitation via the email account used to sign up for Mindsight to participate in Phase one. Individuals who participate in this first phase of this study will be contacted to participate in a focus group for the second phase of this study.

## What will my responsibilities be?

If you volunteer to participate in the first phase of this study, you will be asked to fill out a demographic form, the Attitudes to Mental Illness Questionnaire (AMIQ), and respond to statements about Mindsight.

#### What are the possible risks?

The possible risks for this study will be no greater than any risk you experience in your day to day life. You may be concerned or feel stressed about answering questions related to mental health education. You may also be worried about the privacy of the information you provided. If you have these concerns, you may contact the supervisor of this study Wendy Stanyon, Wendy.Stanyon@uoit.ca who is an expert in mental health education.

# What information will be kept private?

Participants are being recruited for this study via the email accounts provided when signing up for Mindsight. As a result, participant names may be disclosed to the research investigator via the participant's email addresses. However, the purpose of this study is to gather general information about Mindsight and the applicability of this mental health/illness awareness resource. As such, all personal information will be kept confidential and separate from the data being collected. Personal information will not be used in the study. Once the study is complete, all information provided by you will be destroyed.

#### Can participation in the study end early?

You will not be affected in any way if you wish to discontinue your participation in the study. You may request to have your data removed from the study. If you do not wish to continue in the study, all information provided by you will be destroyed /deleted and none of your information will be used as a part of the study. You are also not obliged to answer any questions you do not want to answer and you can still remain in the study.

## How many people will be in the study?

At present, over 2400 individuals have signed up for Mindsight and received a certificate of completion. These individuals will be sent an invitation to participate in Phase one of this study. Individuals who completed the first phase of this study and who identify with an ethnic group will be invited to participate in the second phase.

## What are the possible benefits for me and/or for society?

This research study will add to the current literature and also provide valuable information that can be used to modify Mindsight and develop future online mental health/illness awareness resources. Once the research is complete, the results of the study will be made available to the participants, upon request.

### What if I do not want to take part in the study?

Participants can choose not to take part in this study. Refusing to participate will not affect you in any way.

#### Will there be any costs?

There are no costs to you in order to participate in this study.

## If I have questions or problems, who can I call?

If you have any questions about the research, now or in the future, please contact Alicia Fernandes, principal investigator, alicia.fernandes@uoit.ca, or the research supervisor, Wendy Stanyon, Wendy.Stanyon@uoit.ca. If you have any questions regarding your rights as a research participant, please contact the UOIT research office, 905 721-3111 ext. 2357 or compliance@uoit.ca.

# **Consent Statement**

I have read the preceding info	ormation thorou	ghly and unde	rstand the terms of the research
By responding to this email,	I give consent to	participate in	this study and allow the
researcher to use my data for	analysis of the	study.	
Name of participant:			
Signature	Date:		
Principal Investigator		Date:	

## **Appendix C: Consent Form for Phase Two**

Participant Information Sheet and Consent Form: Focus Groups

Title of study: An Evaluation of an Online Mental Health Awareness Resource: Perspectives of Mindsight Certificate Holders

**Principal investigator**: Alicia Fernandes, Master of Health Sciences student.

Research Supervisor: Dr. Wendy Stanyon, Faculty of Health Sciences.

### What is the purpose of this study?

The objective of the second phase of this study is to collect specific information about Mindsight including its comprehensiveness and overall application of resource since completion, and its positive and negative aspects; we would like to create a discussion about Mindsight and explore barriers to learning, accessibility, and usefulness in assisting individuals to apply what they have learned. The second phase also aims to determine if the educational tool requires modification for future use with ethnic populations.

## What will my responsibilities be?

If you volunteer to participate in the last phase of this study, you will be participating in a focus group with individuals from a cultural background similar to your own. The focus group will take approximately one and a half hours and will be recorded for research purposes. Please remember the content of the discussions during the focus groups is to be kept confidential and is not to be shared outside of this forum.

#### What are the possible risks?

The possible risks for this study will be no greater than any risk you experience in your day to day life. You may be concerned or feel stressed about answering questions related to mental health education. You may also be worried about the privacy of the information you provided. If you have these concerns, you may contact the supervisor of this study Wendy Stanyon, Wendy.Stanyon@uoit.ca who is an expert in mental health education.

#### What information will be kept private?

Participants are being recruited for this study via their email accounts. As a result, participant's names may be disclosed to the research investigator via email addresses. However, the purpose of this study is to gather information about Mindsight as an online mental health/illness awareness resource. As such, all personal information will be kept confidential and separate from the data being collected. Personal information will not be used in the study. Once the study is complete, all information provided by you will be destroyed.

#### Can participation in the study end early?

You will not be affected in any way if you wish to discontinue your participation in the study. You may request to have your data removed from the study. If you do not wish to continue in the study, all information provided by you will be destroyed /deleted and none of your information will be used as a part of the study. You are also not obliged to answer any questions you do not want to answer and you can still remain in the study. Participants who withdraw will still be entered in the draw for two movie passes.

## How many people will be in the study?

Participants who self-identify with an ethnic group and who completed the first phase of this study are invited to participate in the second phase of this study. Each focus group will include 6-8 participants consisting of participants who identify from similar cultural backgrounds. The number of focus groups to be conducted will be determined by the number of cultures identified and the number of participants who show interest in this study.

### What are the possible benefits for me and/or for society?

Participants will provide valuable information about Mindsight and mental illness from a cultural perspective. This information can be used to modify the educational tool to reflect applicability and cultural sensitivity. Once the research is complete, the results of the study will be made available to the participants, upon request. This research study will add to the current literature and also provide valuable information that can be used to modify Mindsight. Participants will have their names entered in a draw to win two movie passes to recognize participation throughout this study.

## What if I do not want to take part in the study?

Participants can choose not to take part in this study. Refusing to participate will not affect you in any way. For those individuals who withdraw from study participation prior to the completion of Phase two, their names will still be included in the random draw for movie tickets.

#### Will there be any costs?

There are no costs to you in order to participate in this study.

### If I have questions or problems, who can I call?

If you have any questions about the research, now or in the future, please contact Alicia Fernandes, principal investigator, alicia.fernandes@uoit.ca, or the research supervisor, Wendy Stanyon, Wendy.Stanyon@uoit.ca. If you have any questions regarding your rights as a research participant, please contact the UOIT research office, 905 721-3111 ext. 2357 or compliance@uoit.ca.

#### **Consent Statement**

I have read the preceding information thoroughly and understand the terms of the
research. By responding to this email, I give consent to participate in this study and
allow the researcher to use my data for analysis of the study.

Name of participant:			
Signature:	Date:		
Principal Investigator		Date:	

# **Appendix D: Invitation to participate**

Title of Study: An Evaluation of an Online Mental Health Awareness Resource: Perspectives of Mindsight Certificate Holders

Principal Investigator: Alicia Fernandes, Master of Health Science student, Health Science, University of Ontario Institute of Technology Research Supervisor: Dr. Wendy Stanyon, Associate Professor, Health Sciences, University of Ontario Institute of Technology

I, Alicia Fernandes, Master of Health Science student, from the Faculty of Health Sciences, University of Ontario Institute of Technology (UOIT), invite you to participate in a research project entitled, An Evaluation of an Online Mental Health Awareness Resource: Perspectives of Mindsight Certificate Holders.

The purpose of this research project is to determine the usefulness and applicability of Mindsight as an online mental health educational resource. Also, I am interested in determining if the educational resource requires modification for future use with ethnic populations. Should you choose to participate, you will be asked to fill out a demographic form, an evaluation form of Mindsight and the Attitudes to Mental Illness Questionnaire (AMIQ) in the first phase of this study. Individuals who participate in this first phase of the study will be invited to participate in focus groups for the second phase of this study where you will be categorized in cultural backgrounds similar to your own.

The estimated participation time in Phase one of this study is approximately 15 minutes. The estimated time of participation in Phase two's focus groups will be approximately one and a half hours.

Participants will provide valuable information about Mindsight and mental illness from a cultural perspective. This information can be used to modify the educational tool to reflect applicability and cultural sensitivity. This research study will also add to the current literature. If you are interested in participating in this research project, please sign the attached consent form and send it via email to myself, Alicia Fernandes, Principal Investigator at alicia.fernandes@uoit.ca.

If you have any pertinent questions about your rights as a research participant, please contact the UOIT research office, 905 721-3111 ext. 2357 or compliance@uoit.ca.

If you have any questions, please feel free to contact myself or Wendy Stanyon (see below for contact information). Thank you,

Alicia Fernandes, Principal Investigator Principal Investigator Contact Information Alicia.fernandes@uoit.ca

Research Supervisor Contact Information Wendy.stanyon@uoit.ca

This study has been reviewed and received ethics clearance through the University of Ontario Institute of Technology's Research Ethics Board [REB#14-012].

## **Appendix E: Reminder email to participate in Phase One**

Title of Study: An Evaluation of an Online Mental Health Awareness Resource: Perspectives of Mindsight Certificate Holders

Principal Investigator: Alicia Fernandes, Master of Health Science student, Health Science, University of Ontario Institute of Technology Research Supervisor: Dr. Wendy Stanyon, Associate Professor, Health Sciences, University of Ontario Institute of Technology

This is a reminder that I, Alicia Fernandes, Master of Health Science student, from the Faculty of Health Sciences, University of Ontario Institute of Technology (UOIT), have invited you to participate in a research project entitled, An Evaluation of an Online Mental Health Awareness Resource: Perspectives of Mindsight Certificate Holders.

The purpose of this research project is to determine the usefulness and applicability of Mindsight as an online mental health educational resource. Also, I am interested in determining if the educational resource requires modification for future use with ethnic populations. Should you choose to participate, you will be asked to fill out a demographic form, an evaluation form of Mindsight and the Attitudes to Mental Illness Questionnaire (AMIQ) in the first phase of this study. Individuals who participate in this first phase of the study will be invited to participate in focus groups for the second phase of this study where you will be categorized in cultural backgrounds similar to your own.

The estimated participation time in Phase one of this study is approximately 15 minutes. The estimated time of participation in Phase two's focus groups will be approximately one and a half hours.

Participants will provide valuable information about Mindsight and mental illness from a cultural perspective. This information can be used to modify the educational tool to reflect applicability and cultural sensitivity. This research study will also add to the current literature. If you are interested in participating in this research project, please sign the attached consent form and send it via email to myself, Alicia Fernandes, Principal Investigator at alicia.fernandes@uoit.ca.

If you have any pertinent questions about your rights as a research participant, please contact the UOIT research office, 905 721-3111 ext. 2357 or compliance@uoit.ca.

If you have any questions, please feel free to contact myself or Wendy Stanyon (see below for contact information).

Thank you,

Alicia Fernandes, Principal Investigator Principal Investigator Contact Information Alicia.fernandes@uoit.ca

Research Supervisor Contact Information Wendy.stanyon@uoit.ca

All participants who have completed the surveys in Phase one of this study will be contacted through email to participate in Phase two's focus groups.

If you have any pertinent questions about your rights as a research participant, please contact the UOIT research office, 905 721-3111 ext. 2357 or compliance@uoit.ca.<mailto:compliance@uoit.ca.>

If you have any questions, please feel free to contact myself or Wendy Stanyon (see below for contact information).

Thank you for your participation in this study.

Alicia Fernandes, Principal Investigator, Health Science Graduate Student, University of Ontario Institute of Technology
Principal Investigator Contact Information
Alicia.fernandes@uoit.ca<mailto:Alicia.fernandes@uoit.ca>

Dr. Wendy Stanyon, Research Supervisor; Associate Professor, University of Ontario Institute of Technology
Research Supervisor Contact Information
Wendy.stanyon@uoit.ca<mailto:Wendy.stanyon@uoit.ca>

Survey links for Phase one:

http://questionnaire.simplesurvey.com/Engine/Default.aspx?surveyID=6c689aaa-e003-4cf3-a4a0-df1e237b9f43&lang=EN

http://questionnaire.simplesurvey.com/Engine/Default.aspx?surveyID=989e12c9-4eee-417e-a963-0b5b78bde1ba&lang=EN

http://questionnaire.simplesurvey.com/Engine/Default.aspx?surveyID=5daa972b-d901-4b87-b7f9-c1ff43d7e290&lang=EN

## **Appendix F: Invitation to participate in focus groups**

Thank you for participating in Phase one of my research project entitled, An Evaluation of an Online Mental Health Awareness Resource: Perspectives of Mindsight Certificate Holders.

I would like to invite you to participate in Phase two of my research project which consists of focus groups where you will be categorized in cultural backgrounds similar to your own. The purpose of these focus groups is to provide valuable information about Mindsight and mental illness from a cultural perspective. This information can be used to modify the educational tool to reflect applicability and cultural sensitivity. Participant names will be kept confidential for the duration of the focus groups with participants being labelled a number to distinguish amongst themselves. All information shared during the focus groups will be recorded and kept confidential. Shared information should not be discussed amongst participants outside of the group session. The focus groups will be held at the University of Ontario Institute of Technology with a time most convenient for the attending participants.

If you are interested in participating in Phase two of my research project and have participated in Phase one, please read the attached consent form and reply to this email that you are interested in participating in Phase two's focus groups. A hard copy of the attached consent form will be provided at the group session where participants will be asked to sign prior to participation in the focus group.

Based on the rate of response, participants will be selected at random to participate in Phase two. Should you be selected, you will receive an email with details of the meet time for the focus groups. If you have not been selected for the focus groups, you will not be contacted further in regards to this study.

Thank you for your ongoing participation in this study.

If you have any pertinent questions about your rights as a research participant, please contact the UOIT research office, 905 721-3111 ext. 2357 or <a href="mailto:compliance@uoit.ca">compliance@uoit.ca</a>. If you have any questions, please feel free to contact myself or Wendy Stanyon (see below for contact information). Thank you,

Alicia Fernandes, Principal Investigator Principal Investigator Contact Information Alicia.fernandes@uoit.ca

Dr. Wendy Stanyon, Research Supervisor Research Supervisor Contact Information Wendy.stanyon@uoit.ca

## **Appendix G: Focus group details**

Thank you for your interest in Phase two of my research project entitled, An Evaluation of an Online Mental Health Awareness Resource: Perspectives of Mindsight Certificate Holders. Focus group details are listed below for your information. Please respond to this email indicating which focus group session you would like to attend. Please note you can only attend one session.

Wednesday, Feb 4th from 7:00pm-9:00pm – UA 3120, University of Ontario Institute of Technology North Campus

Sunday, Feb 8th from 2:00pm-4:00pm – UA 3140, University of Ontario Institute of Technology North Campus

Parking will be complimentary for those parking at the University of Ontario Institute of Technology. Once arrived at the group session, you will be asked to fill out an anonymous demographic form and a consent form to participate. Numbers will be assigned to individuals at the time of arrival at focus group location. Please note that in order to participate in Phase two of this study, you must have already completed the three questionnaires of Phase one. If you have not, please let me know and I will send you the links.

Closer to your group session, I will email you directions to the room that your session will be held, parking information, etc.

Thank you for your ongoing participation in this study.

If you have any pertinent questions about your rights as a research participant, please contact the UOIT research office, 905 721-3111 ext. 2357 or compliance@uoit.ca. If you have any questions, please feel free to contact myself or Wendy Stanyon (see below for contact information). Thank you,

Alicia Fernandes, Principal Investigator Principal Investigator Contact Information Alicia.fernandes@uoit.ca

Dr. Wendy Stanyon, Research Supervisor Research Supervisor Contact Information Wendy.stanyon@uoit.ca

# **Appendix H: Demographic Information**

- 1. Choose the best answer that applies to you
  - a. Male
  - b. Female
- 2. Please specify your date of birth in the form of DD/MM/YY
- 3. Do you identify with an ethnic group Other than Canadian?
  - a. Yes
  - b. No
- 4. If answered yes to question 3, click the ethnic group that best applies to you
  - a. Canadian
  - b. Latino/ Hispanic
  - c. Middle Eastern
  - d. African
  - e. Caribbean
  - f. South Asian
  - g. East Asian
  - h. Mixed
  - i. Other
- 5. What is the highest level of education that you have completed?
  - a. Less than high school
  - b. High school
  - c. Post-secondary (university, college, trades school)
  - d. Post-graduate (Master's, Doctorate)
- 6. What is your current employment status?
  - a. Employed
  - b. Out of work
  - c. Homemaker
  - d. Student
  - e. Retired
  - f. Unable to work
  - g. Other
- 7. If answered a) in Question #6, choose the occupation category that best suits you
  - a. Agricultural/Farmer

- b. Financial Services
- c. General business/Office Worker
- d. Government/Public Services
- e. Healthcare—Medical Services and Products
- f. Hospitality and Recreation
- g. Laborer (Hourly worker, machine operator, etc.)
- h. Manufacturing-Consumer/Industrial Goods
- i. Real Estate Services/Property Management
- j. Sales (salesperson, broker, etc.)
- k. Services (retail sales, clerk, etc.)
- 1. Teacher/Educator
- m. Transportation Services
- n. Law Enforcement/Military
- o. Other
- 8. Do you have personal contact with a person who has been diagnosed with a mental illness?
  - a. Yes
  - b. No
- 9. Have you or someone you know received treatment for a mental illness?
  - a. Yes
  - b. No

# **Appendix I: Evaluation of Mindsight**

- 1. Mindsight is a useful online resource for promoting mental health/illness awareness.
- a) Strongly Agree
- b) Agree
- c) Undecided
- d) Disagree
- e) Strongly Disagree
- 2. Having completed Mindsight, I have a greater understanding of mental illness and some of the self-help strategies.
- a) Strongly Agree
- b) Agree
- c) Undecided
- d) Disagree
- e) Strongly Disagree
- 3. Having completed Mindsight, I have a greater understanding of resources and supports that are available in the community.
- a) Strongly Agree
- b) Agree
- c) Undecided
- d) Disagree
- e) Strongly Disagree
- 4. I am able to apply some of the knowledge I gained from completing Mindsight in my everyday life (work life, personal life, etc.)
- a) Strongly Agree
- b) Agree
- c) Undecided
- d) Disagree
- e) Strongly Disagree
- 5. I will recommend Mindsight to other individuals who are looking for a mental health/illness awareness resource.
- a) Strongly Agree
- b) Agree
- c) Undecided
- d) Disagree
- e) Strongly Disagree

- 6. I found Mindsight to be a relatively easy resource to navigate through.
- a) Strongly Agree
- b) Agree
- c) Undecided
- d) Disagree
- e) Strongly Disagree
- 7. Overall, my completion of Mindsight has had a positive impact on my attitudes towards individuals with mental illness.
- a) Strongly Agree
- b) Agree
- c) Undecided
- d) Disagree
- e) Strongly Disagree
- 8. I found the content provided in Mindsight to be representative of the mental health challenges that individuals from different ethnicities may face.
- a) Strongly Agree
- b) Agree
- c) Undecided
- d) Disagree
- e) Strongly Disagree
- 9. I think Mindsight is a useful mental health/illness awareness resource for individuals from different ethnicities.
- a) Strongly Agree
- b) Agree
- c) Undecided
- d) Disagree
- e) Strongly Disagree
- 10. The format of Mindsight takes into consideration the different learning styles of individuals.
- a) Strongly Agree
- b) Agree
- c) Undecided
- d) Disagree
- e) Strongly Disagree

- 11. Mindsight is a valuable mental health/illness resource for future reference.
- a) Strongly Agree
- b) Agree
- c) Undecided
- d) Disagree
- e) Strongly Disagree
- 12. I frequently consult and am comfortable with using web-based materials for information.
- a) Strongly Agree
- b) Agree
- c) Undecided
- d) Disagree
- e) Strongly Disagree

# **Appendix J: Attitudes to Mental Illness Questionnaire**

Please read the following statement: John has been injecting heroin daily for 1 year. Please select the answer which best reflects your views:

1. Do you think that this would damage John's career?

	a. Strongly agree -2
	b. Agree -1
	c. Neutral 0
	d. Disagree +1
	e. Strongly disagree +2
	f. Don't know 0
2.	I would be comfortable if John was my colleague at work?
	a. Strongly agree +2
	b. Agree +1
	c. Neutral 0
	d. Disagree -1
	e. Strongly disagree -2
	f. Don't know 0
3.	I would be comfortable about inviting John to a dinner party?
	a. Strongly agree +2
	b. Agree +1
	c. Neutral 0
	d. Disagree -1
	e. Strongly disagree -2

	f. Don't know 0
4.	How likely do you think it would be for John's wife to leave him?
	a. Very likely -2
	b. Quite likely -1
	c. Neutral 0
	d. Unlikely +1
	e. Very unlikely +2
	f. Don't know 0
5.	How likely do you think it would be for John to get in trouble with the law?
	a. Very likely -2
	b. Quite likely -1
	c. Neutral 0
	d. Unlikely +1

Attitudes to Mental Illness Questionnaire (AMIQ). Adapted from Luty, J., Fekadu, D., Umoh, O., & Gallangher, J. (2006). Validation of a short instrument to measure stigmatizing attitudes toward mental illness. *The Psychiatry*. 30, 257-260.

e. Very unlikely +2

f. Don't know 0

## **Appendix K: Focus Group Guiding Questions**

- 1. Did you find the mental health education/information useful in Mindsight?
  - o What was something new that you learned?
  - Was there information that you were already familiar with?
  - How has your perception of mental health changed after reviewing of this resource?
  - Would you recommend this resource to individuals looking for information about mental illness/health?
  - o Did you find the tabs to be reflective of major mental health issues?
  - Was the information listed under the tabs informative?
- 2. Did you find the information learned helpful in your personal/professional lives?
  - o How have you applied what you have learned in your everyday life?
  - o How has this resource helped you to better cope with everyday struggles?
  - O How has this resource helped you help someone else cope with everyday struggles?
  - Would you consult this resource if you encountered mental illness in the future?
  - Would you recommend this resource to someone who may encounter mental illness?
- 3. Did you find the information provided in Mindsight to be sensitive to varying ethnicities?
  - What aspects of Mindsight were sensitive to ethnicities?
  - What aspects of Mindsight were not sensitive to ethnicities?
  - What are the general perspectives of mental health in your ethnicity?
  - O Do you think Mindsight can help change perspectives about mental health/illness to ethnicities that may not understand it?
- 4. Was Mindsight an easy online resource to navigate through?
  - o What aspects of Mindsight did you like?
  - o What aspects of Mindsight did you not like?
  - Was the information on Mindsight provided in a clear and concise way?
  - O Do you think Mindsight is a user friendly resource?
- 5. Do you feel comfortable talking about mental health/illness?
  - o Is mental health an uncomfortable topic to discuss?

- What aspects of mental health/illness do you feel uncomfortable talking about?
- o Did Mindsight further your comfort level with mental health/illness?
- o Did Mindsight hinder your comfort level with mental health/illness?

### Appendix L: Focus group participant demographic data

# Participant #1

Gender: F Age: 22

Identify with ethnic group: No Ethnic group (if applicable): N/A

Highest level of education completed: High school

Current employment status: Employed Occupation category (if applicable): Sales

Personal contact with individual with mental illness: Yes

You or someone you know received mental illness treatment: Yes

## Participant #2

Gender: F Age: 45

Identify with ethnic group: No Ethnic group (if applicable): N/A

Highest level of education completed: Post-secondary

Current employment status: Employed

Occupation category (if applicable): Teacher/Educator Personal contact with individual with mental illness: Yes

You or someone you know received mental illness treatment: Yes

## Participant #3

Gender: M Age: 71

Identify with ethnic group: Yes Ethnic group (if applicable): Mixed

Highest level of education completed: Post-secondary

Current employment status: Retired Occupation category (if applicable): N/A

Personal contact with individual with mental illness: Yes

You or someone you know received mental illness treatment: Yes

## Participant #4

Gender: F Age: 38

Identify with ethnic group: Yes Ethnic group (if applicable): Mixed

Highest level of education completed: Post-graduate

Current employment status: Employed Occupation category (if applicable): Other

Personal contact with individual with mental illness: Yes

You or someone you know received mental illness treatment: Yes

## Participant #5

Gender: M Age: 49

Identify with ethnic group: No Ethnic group (if applicable): N/A

Highest level of education completed: Post-secondary

Current employment status: Employed

Occupation category (if applicable): Government/Public Services

Personal contact with individual with mental illness: No

You or someone you know received mental illness treatment: No

## Participant #6

Gender: F Age: 49

Identify with ethnic group: Yes Ethnic group (if applicable): African

Highest level of education completed: Post-secondary

Current employment status: Employed

Occupation category (if applicable): Healthcare—Medical Services and Products

Personal contact with individual with mental illness: Yes

You or someone you know received mental illness treatment: No

# Participant #7

Gender: F Age: 19

Identify with ethnic group: Yes

Ethnic group (if applicable): Middle Eastern Highest level of education completed: High school

Current amplement status: Student

Current employment status: Student Occupation category (if applicable): N/A

Personal contact with individual with mental illness: No

You or someone you know received mental illness treatment: No

## Participant #8

Gender: F Age: 26

Identify with ethnic group: No Ethnic group (if applicable): N/A

Highest level of education completed: Post-secondary

Current employment status: Employed

Occupation category (if applicable): Manufacturing—Consumer/Industrial Goods

Personal contact with individual with mental illness: Yes

You or someone you know received mental illness treatment: Yes

# Participant #9

Gender: F Age: 25

Identify with ethnic group: No Ethnic group (if applicable): N/A

Highest level of education completed: Post-secondary

Current employment status: Student Occupation category (if applicable): N/A

Personal contact with individual with mental illness: Yes

You or someone you know received mental illness treatment: Yes