

The Impact of Indigenous Identity and Treatment Seeking Intention on the  
Stigmatization of Substance Use

by

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### Abstract

Substance use disorders are one of the most stigmatized mental health issues. There is a disproportionate burden of substance use disorders (SUDs) and related harms on Indigenous peoples in Canada. The current study examined the public stigma associated with substance use and how that stigma intersects with Indigenous identity and treatment seeking intention. Participants ( $N = 711$ ) were randomly assigned to read one of four vignettes depicting a person living with a SUD and then complete an online survey. Vignettes differed on the character's ethnicity (Caucasian vs. First Nations) and their treatment seeking intention (seeking treatment vs. not seeking treatment). Participants then completed a series of questionnaires to assess stigma, including measures of perceived unpredictability and incompetence, desired social distance, and emotional response. Significant main effects of both ethnicity and treatment seeking were found on all three outcome measures of stigma. Specifically, participants assigned a vignette depicting a First Nations person responded with more stigmatizing attitudes than participants assigned a vignette of a Caucasian person. Additionally, participants assigned a vignette of a person not seeking treatment responded with more stigmatizing attitudes than participants assigned a vignette of a person who sought treatment. These findings highlight the need for future anti-stigma interventions and educational programming for substance use in general and within an Indigenous context. Furthermore, documenting and addressing prejudice towards Indigenous populations is a crucial step in working towards reconciliation.

*Keywords:* substance use, Indigenous, treatment seeking, stigma.

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## **The Impact of Indigenous Identity and Treatment Seeking Intention on the Stigmatization of Substance Use**

Substance Use Disorders (SUDs) are characterized by problematic use of alcohol or other substances that result in distress and impairment to everyday life (American Psychological Association, 2013). In 2012, 21.6% of Canadians (approximately six million people) met the criteria for a SUD at some point in their lifetime (Pearson, Janz, & Ali, 2013). Alcohol use disorder (AUD) has been identified as the most common form of SUD, with 18.1% of Canadians meeting the criteria for an AUD during their lifetime (Pearson et al., 2013). AUD is defined by the compulsive consumption of alcohol and an associated inability to regulate alcohol intake despite experiencing the negative social, occupational, or health related consequences of doing so (National Institute on Alcohol Abuse and Alcoholism, 2017). Like other SUDs, AUDs tend to be chronic and have a high rate of relapse.

SUDs such as AUD are particularly debilitating for a number of reasons. Higher alcohol consumption has been causally linked to several physical diseases including ischemic heart disease, ischemic and hemorrhagic stroke, diabetes, various forms of cancer (e.g., mouth, colon, liver, and breast), preterm birth complications, and fetal alcohol syndrome (Rehm et al., 2010). Additionally, when individuals who have developed a dependence or addiction to alcohol try to stop drinking, many develop alcohol withdrawal syndrome (AWS) which can result in tremors, nausea, vomiting, sweating and high blood pressure (Taub & Beresford, 2015). Patients with AWS can also experience more severe symptoms such as seizures, hallucinations, and delirium tremens; the latter of which can be life-threatening if untreated.

Excessive alcohol use not only negatively impacts physical health but may also be detrimental to one's mental well-being. For example, comorbid AUD and major depressive disorder is a common dual-diagnosis (Grant & Harford, 1995; Merikangas et al., 1998), with some researchers suggesting that problematic alcohol use is causally linked to an increased risk for major depression (Fergusson, Boden, & Horwood, 2009). In addition, AUD is also commonly diagnosed with anxiety disorders (Merikangas et al., 1998), which may be related to a temporary decrease in state anxiety following alcohol consumption (Kushner et al., 1996). However, it has also been proposed that excessive alcohol consumption and withdrawal may lead to increased long-term anxiety (Kushner, Abrams, & Borchardt, 2000). Kushner and colleagues (2000) suggested that both the temporary decrease and a long-term increase in anxiety caused by alcohol consumption may contribute to a feed-forward cycle of escalating anxiety and alcohol use, which may explain the comorbidity of these disorders.

Finally, AUD may negatively impact aspects of one's social well-being. SUDs have been consistently reported as the most highly stigmatized group of mental health disorders (Corrigan, Kuwabara, & O'Shaughnessy, 2009; Lang & Rosenberg, 2017; Mannarini & Boffo, 2015; McGinty, Goldman, Pescosolido, & Barry, 2015; van Boekel, Brouwers, van Weeghel, & Garretsen, 2013), and AUD is no exception. Numerous studies have concluded that AUD is viewed more negatively than other mental health disorders unrelated to substance use (Corrigan et al., 2005b; Mannarini & Boffo, 2015; Schomerus et al., 2010). Specifically, individuals with AUD elicit more social rejection and are often viewed as both dangerous and responsible or at fault for their disorder (Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000; Schomerus et al., 2010).



### **The Current Study**

Research has shown that SUDs are the most stigmatized group of mental health disorders (Corrigan et al., 2009; Lang & Rosenberg, 2017; Mannarini & Boffo, 2015; McGinty et al., 2015; Schomerus et al., 2010; van Boekel et al., 2013), and those who are untreated and symptomatic are stigmatized to an even greater extent (McGinty et al., 2015). Indigenous people with SUDs are likely a severely stigmatized demographic due to: (1) the disproportionate burden of substance use and related harms on Indigenous populations, (2) the prevalent lack of knowledge and negative attitudes directed towards these individuals, and (3) the severe stigma associated with substance use in general. Furthermore, Indigenous peoples with an untreated or symptomatic SUD may be stigmatized to an even greater extent than those with an asymptomatic or treated SUD. However, to my knowledge, no study to date has examined the social stigma specific to Indigenous peoples in Canada with SUDs, nor the stigma associated with choosing not to seek treatment. The stigma attributable to Indigenous substance use and treatment seeking is important to document, given the higher risk of SUDs and lower rates of treatment seeking for Indigenous peoples in Canada. As such, the current study aims to address these gaps in the literature. The Truth and Reconciliation Commission (TRC) Calls to Action highlight the need to eliminate the health disparities between Indigenous and non-Indigenous Canadians, specifying addictions as an area of focus:

We call upon the federal government, in consultation with Aboriginal peoples, to establish measureable goals to identify and close the gaps in health outcomes between Aboriginal and non-Aboriginal communities ... Such efforts would focus on indicators such as: infant mortality, maternal health, suicide, mental health,

addictions, life expectancy, birth rates, infant and child health issues, chronic diseases, illness and injury incidence, and the availability of appropriate health services. (Truth and Reconciliation Commission of Canada, 2015, p. 161)

An understanding of the extent to which Indigenous peoples with untreated SUDs are stigmatized is essential to close the gaps in health outcomes among these populations, and in turn, necessary in working towards reconciliation.

### **Literature Review**

**Stigma.** Stigma refers to the co-occurrence of labeling, stereotyping, separation, status loss, and discrimination towards a group of individuals, coming from a position of power (Link & Phelan, 2001). Stigma can be delineated into three interrelated subtypes: social, structural, and internalized stigma (Corrigan, Kerr, & Knudsen, 2005a; Livingston & Boyd, 2010). Social stigma – also known as public or enacted stigma – occurs when large social groups support a stereotype or set of stereotypes related to the stigmatized group (Corrigan et al., 2005a; Livingston & Boyd, 2010; Luoma et al., 2007). According to Corrigan (2004), *social stigma* impedes access to crucial social opportunities. For example, people who are labelled as mentally ill may have greater difficulty finding employment if potential employers endorse negative stereotypes of mental illness (e.g., “people with mental illness are unreliable or incompetent”). *Structural stigma*, also known as institutional stigma, acknowledges a systematic level of stigma. It refers to the policies, rules, or procedures of private and public structures that impede the rights and opportunities of the stigmatized group (Corrigan et al., 2005a; Corrigan et al., 2005c; Livingston & Boyd, 2010). For instance, Corrigan and colleagues (2005c) examined structural stigma of mental illness by reviewing all relevant United States bills introduced

in 2002. Bills that exhibited structural stigma towards mental illness attempted to restrict firearm ownership for anyone with a current or previous history of mental illness and limited the parental rights of individuals with a history of mental illness. While strict gun legislation and parental custody legislation is crucial for the safety and security of the public, Corrigan and colleagues (2005c) note that the legislation were repeatedly mistaking “mental illness” for “incompetence”. Finally, *internalized stigma*, also referred to as self or felt-stigma occurs when a person within a stigmatized group supports the stereotypes surrounding them (Corrigan, 2004; Corrigan et al., 2005a; Corrigan et al., 2005c; Livingston & Boyd, 2010). For those with mental illness, the process of internalizing stigma involves personally identifying with stereotypes, anticipating social exclusion, and believing that they are less valuable or incompetent as a result of their mental illness (Corrigan, 2004; Corrigan et al., 2005a; Livingston & Boyd, 2010). Internalized stigma is related to several negative outcomes for marginalized groups, such as increased rates of depression and lower rates of help-seeking behaviour (von Hippel, Brener, & Horwitz, 2018).

**Stigma and substance use.** As previously mentioned, SUDs are known to be the most severely stigmatized group of mental health disorders (Corrigan et al., 2009; Lang & Rosenberg, 2017; Mannarini & Boffo, 2015; McGinty et al., 2015; Schomerus et al., 2010; van Boekel et al., 2013). A study conducted by Corrigan and colleagues (2009) compared how blameworthy and dangerous participants perceived someone with a drug addiction to that of other mental illnesses. They found that individuals with a drug addiction were viewed as more responsible for their condition than those with a different mental illness or a physical disability. Additionally, people with a drug addiction were

considered more dangerous and provoked more fear. Similarly, in a review of the literature consisting of 33 studies based on 17 population surveys, Schomerus and colleagues (2010) reported that individuals with AUD were perceived as more responsible for their condition than were individuals with other forms of mental illness unrelated to substance use. Importantly, stigmatizing views such as these have been consistently found across studies comparing SUDs to a number of other mental illnesses (e.g., such as anxiety, depression, eating disorders, and schizophrenia; Mannarini & Boffo, 2015; Schomerus et al., 2010) and have also been shown to persist cross-culturally (Schomerus et al., 2010; Sorsdahl, Stein, & Myers, 2012) and across a wide age range (e.g., as demonstrated by youth as young as 13 years old; Corrigan et al., 2005b).

The stigma associated with SUDs may have severe ramifications for targeted individuals. For instance, it has been suggested that health care professionals may view patients with SUDs in a particularly negative light, which can reduce the quality of medical care they receive (van Boekel et al., 2013). For example, van Boekel and colleagues (2013) reported that health professionals were found to hold patients with SUDs in lower regard, feel less satisfied when working with this patient group, and have less motivation to work with this patient group. The researchers note that these responses are likely related to negative stereotypes toward individuals with SUDs—such that they are violent, manipulative, or lack motivation which may lead health care professionals to feel frustrated and resentful towards them (van Boekel et al., 2013). In these cases, substandard care may result because health care professionals spend less time with, engage less personally with, and feel less empathy for these individuals. In another study that examined the attitudes of probation officers towards probationers with mental

illnesses including SUDs, not only did probation officers hold especially stigmatizing attitudes towards these individuals (e.g., they were more likely to blame the probationer for their condition), but these stigmatizing attitudes significantly influenced the officers' case-management decisions (Louden, 2009). In essence, the more negative an attitude that a probation officer held, the more likely the officer was to deem the case "high-risk". Overall, the literature demonstrates a pervasive and severe stigmatization of SUDs that can negatively impact the lives of those living with this form of mental illness.

**Seeking treatment for SUDs.** As mental illness is clearly a ubiquitous health concern, substantial effort has been put forth to understand the various aspects of mental health disorders. One issue that is regularly reported in the literature is the reluctance to seek and utilize mental health treatment (McChesney, Adamson, & Shevlin, 2015; Mojtabai, Olfson, & Han, 2016). While the majority of individuals with mental illness do not receive treatment, treatment utilization is even lower for those specifically with SUDs. For example, only 15% of a Canadian sample living with substance use disorders indicated that they had received adequate care (Khan, 2017). Similarly, findings from the 2015 National Survey of Drug Use and Health (NSDUH) revealed that approximately only one in 10 individuals with a SUD received any form of treatment (Substance Abuse and Mental Health Service Administration, 2016), and following a national survey of alcohol and related conditions, less than 20% of people in the United States with lifetime AUD ever get professional help (Grant et al., 2015).

There are several obstacles that can prevent people with mental illness from seeking treatment. Some significant barriers to treatment-seeking include confidentiality concerns, accessibility to services, lack of knowledge surrounding mental health services,

and fear or stress surrounding both help-seeking behaviour and the mental health service itself (Clement et al., 2015). Specific to SUDs, four factors have been identified as significant barriers to seeking treatment (Possemato et al., 2016). First, difficulty identifying the problem may prevent individuals from seeking treatment, which may occur if they choose to reject their diagnosis or do not believe that they have a problem. Second, individuals may avoid treatment if they are concerned about or dislike the treatment process, in which case they may decide to try and manage the problem on their own. Third, logistical barriers may contribute to treatment avoidance, including potential financial burdens or difficulties accessing treatment facility locations. Finally, the fourth factor which creates a barrier to treatment is stigma. For example, an individual may avoid treatment if they are concerned that their family would find out, that people would label them (i.e., call them an alcoholic), or otherwise treat them differently (Possemato et al., 2016).

**Stigma as a barrier to seeking treatment.** Stigma has been consistently identified in the literature as a significant barrier to seeking mental health treatment (e.g., Corrigan, 2004; Clement et al., 2015; Kulesza, Pedersen, Corrigan, & Marshall, 2015; Vogel, Wade, & Hackler, 2007). Social stigma and internalized stigma in particular have been linked with lower help-seeking behaviour (Bathje & Pryor, 2011; Corrigan, 2004; Vogel et al., 2007). As previously discussed, social stigma arises when social groups support stereotypes related to the stigmatized group (Corrigan et al., 2005a). In this case, social stigma may lead people to attempt to conceal or deny their mental illness in order to avoid feeling ostracized. This reaction to stigma may become a monumental barrier to receive care, as a person who does not identify with the label of “mental ill” is less likely

to seek mental health treatment (Corrigan, 2004). In addition, Corrigan (2004) explains that internalized stigma (i.e., when a person supports the stereotypes surrounding a group to which they belong) may act as a barrier to care if individuals who understand the stereotypes of their mental illness feel that it is easier to avoid the label of being mentally ill and the associated stereotypes than it is to believe those stereotypes apply to them. Furthermore, it appears that social stigma and internalized stigma are related to and can influence one another. For example, Bathje and Pryor (2011) reported a model in which awareness and endorsement of social stigma predicts internalized stigma. Endorsement of social stigma and internalized stigma were both negatively related to attitudes towards seeking counselling, which are directly related to intentions to seek counselling. Other studies have reported that the relationship between social stigma and intentions to seek counselling were mediated by internalized stigma, suggesting that those who internalize social stigma are less likely to intend to seek treatment compared to those who do not internalize social stigma (Vogel et al., 2007; von Hippel et al., 2018). As such, both forms of stigma can influence attitudes and have important implications for help-seeking behaviours (Bathje & Pryor, 2011; Corrigan, 2004).

It is essential to understand how stigma can act as a barrier to seeking treatment for a SUD. However, it is also important to understand how someone's treatment seeking behaviour can influence the extent to which they are stigmatized. McGinty and colleagues (2015) examined the stigma surrounding different mental illnesses and whether portraying these mental illnesses as treatable reduced the associated stigma. Participants presented with vignettes illustrating an untreated and symptomatic mental illness or SUD responded with higher scores on stigma measures as compared to when

the same illnesses were framed as treated. Notably, even though vignette characters who sought treatment were viewed less negatively overall, vignette characters who were treated for a SUD were still regarded more negatively than those treated for a mental illness unrelated to substance use. The results of McGinty and colleagues' (2015) study demonstrate that individuals with a treated and asymptomatic SUD are viewed less negatively than those who have not sought treatment and are living with a visible SUD. Findings such as these could be explained through the "Belief in a Just World" phenomenon (Lerner, 1980). To maintain a belief that the world we live in is predictable and fair, we tend to assume that a specific action will result in fair and just consequences for that individual. In other words, as it is much too daunting to accept that misfortune can happen to just anyone (i.e., ourselves), we convince ourselves that those in unfortunate circumstances are somehow at fault for their own misfortune, also known as "blaming the victim" (Lerner & Miller, 1978). Viewing individuals who have not sought treatment for their SUD more harshly than those who have can be explained from a victim-blaming perspective – rather than consider and come to terms with the numerous unjust barriers to treatment seeking, people may believe that those who have not sought treatment are more "deserving" of their suffering, and they feel less empathetic towards these individuals.

Findings from numerous studies would suggest that stigma acts as a barrier to help seeking (Clement et al., 2015; Corrigan, 2004; Kulesza et al., 2015; Vogel et al., 2007). Furthermore, those who do not seek help are stigmatized for failing to do so (McGinty et al., 2015). The literature in this area highlights the complexity of substance



use stigma and moreover, how related variables such as help seeking can intersect with said stigma.

**Substance use and related harms among Indigenous populations.** Despite that AUD does not discriminate age, gender, or ethnicity—research has shown that certain groups have an increased risk to develop AUD. Specifically, Indigenous peoples<sup>1</sup> in Canada bear a disproportionate burden of substance use and related harms compared to all other Canadians (Firestone, Tyndall, & Fischer, 2015). Likewise, Indigenous peoples in the United States have much higher rates of severe AUD compared to the general United States population (Grant et al., 2015). Relatedly, rates of death by suicide in specific Indigenous communities are incredibly high (Chandler & Lalonde, 1998), and these deaths appear to be related to alcohol use. The incidence of death by suicide for Inuit in Arctic Canada is ten times greater than the national rate, making these populations one of the most severely at-risk groups for death by suicide worldwide (Kral, 2012). This pattern persists in Newfoundland and Labrador, where Inuit and Innu communities experience suicide rates 15 and 10 times higher than the national rate, respectively (Pollock, Mulay, Valcour, & Jong, 2016). Furthermore, alcohol appears to be a consistent contextual factor related to Indigenous deaths by suicide. For example, 22 out of 30 cases of Indigenous deaths by suicide in Quebec reportedly involved alcohol intoxication at the time of death (Laliberté & Tousignant, 2009), whereas only two cases had no history of lifetime alcohol abuse.

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<sup>1</sup> *Indigenous Peoples* is a collective term referring to people in Canada who identify as either Métis, First Nations, or Inuit. *Aboriginal Peoples* was previously the most commonly used term in Canada.

As previously discussed, those with SUDs often do not receive professional treatment (Grant et al., 2015); this is particularly true of Indigenous populations because an Indigenous person is much less likely to seek treatment for a mental illness or SUD compared to the general population (Marsh, Coholic, Cote-Meek, & Najavits, 2015). Even when Indigenous peoples do seek mental health treatment, they tend to have higher rates of premature treatment dropout when compared to non-Indigenous clients (Li, Sun, Marsh, & Anis, 2013). This lack of treatment utilization among Indigenous populations is of particular concern given that those with untreated and symptomatic SUDs are typically stigmatized to a greater extent than those who have sought treatment and are not showing symptoms (McGinty et al., 2015).

There are several essential reasons why Indigenous peoples in Canada are at higher risk for developing SUDs and why they are less likely to seek treatment. A large body of research supports the presence of a relationship between trauma and the subsequent development of SUDs (Coffey, Read, & Norberg, 2008; Dube et al., 2003; Jacobsen, Southwick, & Kosten, 2001). For example, Dube and colleagues (2003) found that risk for the early development of disordered substance use increased by two to four times with each adverse childhood experience imposed upon a child (e.g., family violence, physical abuse, sexual abuse, the death of a parent, etc.). Research has shown that Indigenous peoples in Canada have experienced and continue to experience a cycle of intergenerational<sup>2</sup> or historical trauma (Bombay, Matheson, & Anisman, 2014). This cycle of trauma is a result of the physical, biological, and cultural genocide which took

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<sup>2</sup> Intergenerational trauma refers to the passing of trauma through generations of a family or community.

place throughout Canada's history in its dealings with Indigenous peoples (Truth and Reconciliation Commission of Canada, 2015). These forms of trauma have played a large role in many of the social disparities between Indigenous and non-Indigenous Canadians, such as income inequality, unemployment, lower education level, food insecurity, inadequate housing/homelessness, and lower average life expectancy (Egeland, Pacey, Cao, & Sobol, 2010; Minich et al., 2011; Roshanafshar & Hawkins, 2015; Wilson & Macdonald, 2010). Furthermore, it is well understood that an individual's health is greatly impacted by certain social factors, called the social determinants of health (Loppie Reading & Wien, 2009). Perhaps the most well-known social determinants of health – such as education, employment, income, health behaviours, and food security – have been labelled “proximal” determinants of health (Loppie Reading & Wien, 2009). In the case of Indigenous peoples in Canada, historical and political factors such as colonialism (e.g., the Indian residential school system, community and family relocation, cultural suppression, etc.; Truth and Reconciliation Commission of Canada, 2015) directly form the proximal determinants of health, such as education level and food insecurity. In essence, there is a clear link between colonialism, intergenerational trauma and the social disparities experienced by Indigenous peoples today. These social disparities then determine the quality of health of Indigenous peoples, including risk for substance use and a lower propensity to seek help.

**Public perceptions of Indigenous peoples in Canada.** To reiterate, the quality of health of Indigenous peoples in Canada has been, historically and at present, heavily and directly influenced by colonization and its subsequent harms (Adelson, 2005; Harding, 2006; Loppie Reading & Wien, 2009; Truth and Reconciliation Commission of

Canada, 2015). The cultural genocide and forced assimilation of Indigenous peoples into the Canadian mainstream has resulted in a cycle of intergenerational trauma (Bombay et al., 2014). The interconnected relationship between trauma and substance use (see Coffey et al., 2008) coupled with the impact of colonization on the social determinants of health likely account for the higher rates of substance use and related harms experienced by Indigenous populations in Canada.

One of the biggest concerns regarding the modern cultural suppression of Indigenous peoples in Canada is related to a blatant lack of understanding among the general population regarding the lives and history of Indigenous peoples, which in turn hinders public knowledge of the challenges specifically faced by Indigenous populations today. This knowledge gap was showcased by the results of The 2013 Aboriginal Awareness Survey conducted to assess knowledge of First Nations, Métis, and Inuit in Canada among three hundred and ten first year university students in Newfoundland and Labrador (Godlewska et al., 2017b; Godlewska, Schaepli, Massey, Freake, & Rose, 2017c). The questionnaire examined what the students have learned about Indigenous peoples, where they learned this information, and their social attitudes towards these groups. The survey consisted of a quantitative test portion (Godlewska et al., 2017b) and a qualitative portion (Godlewska et al., 2017c). In the quantitative portion, the results were generally very poor, with an average score of 22.18% ( $SD = 14.44\%$ , range = 1.25% to 62.25%) suggesting that students who completed the survey had a very poor understanding of Indigenous peoples in their province. Regarding the qualitative portion of the study, the researchers reported that negative themes greatly outnumbered the positive ones, where a negative theme encompassed prejudice and/or willful ignorance.

However, the knowledge gap surrounding Indigenous literacy is not exclusive to Newfoundland and Labrador. The Aboriginal Awareness survey conducted at Memorial University was an adaptation of an awareness survey developed and administered at Queens University in Ontario (Godlewska, Massey, Adjei, & Moore, 2013). The results from the Queens survey were similar to that of Memorial's, as students at Queens scored an average of 27% on the quantitative test portion, with over 50% of students scoring below 26.5%. The Aboriginal Awareness surveys illustrate how markedly misinformed and unaware many Canadian first year university students are regarding the lives and history of Indigenous peoples in Canada. In line with these findings, it appears that many Canadians are generally unfamiliar with the effects of colonization on Indigenous peoples in Canada (Loppie Reading, 2014).

### **Objectives and Hypotheses**

The goals of the current study were twofold: *First*, to examine public perceptions and attitudes towards Indigenous people living with SUDs; and *second*, to explore these views towards individuals living with SUDs who choose not to seek treatment. To do this, a factorial design was employed with ethnicity (Caucasian vs. First Nations) as one independent variable and treatment seeking (seeking treatment vs. not seeking treatment) as a second independent variable. Participants were randomly assigned to read one of four vignettes which described the following: (1) an Indigenous person with a SUD who does seek treatment; (2) an Indigenous person with a SUD who does not seek treatment; (3) a Caucasian person with a SUD who does seek treatment; or (4) a Caucasian person with a SUD who does not seek treatment. This design allowed us to compare the stigmatization of Indigenous peoples living with a SUD versus the stigmatization of

Caucasian individuals living with the same disorder, as well as the stigmatization of individuals who do not seek treatment for a SUD compared to the stigmatization of those who do seek treatment. First, it was hypothesized that vignettes portraying an Indigenous person would be viewed more negatively than vignettes of a Caucasian person. This prediction was based on previous research documenting a general lack of understanding of Indigenous history throughout Canada, which has led to negative stereotypes of Indigenous peoples in Canada living with SUDs (Godlewska et al., 2017b; Godlewska et al., 2017c; Harding, 2006; Loppie Reading, 2014). Second, it was hypothesized that vignettes of people choosing not to seek treatment would be viewed more negatively than the vignettes of people seeking treatment for their SUD. This prediction was based on previous research reporting that individuals with an untreated or symptomatic mental illness are more highly stigmatized than those with a treated and asymptomatic mental illness (McGinty et al., 2015).

## **Method**

### **Participants**

Participants ( $N = 711$ ) ranged in age from 17-58 years ( $M = 24.56$ ,  $SD = 6.544$ ). Of those who reported biological sex 480 self-identified as female (75%) and 160 self-identified as male (25%). The majority of participants identified as Caucasian (80.7%;  $n = 574$ ), followed by Indigenous (5.1%;  $n = 36$ ), Asian (3.4%;  $n = 24$ ), Hispanic/Latino (1.4%;  $n = 10$ ), African Canadian/Black (1.1%;  $n = 8$ ), East Indian (0.8%;  $n = 6$ ), and Middle Eastern (0.4%;  $n = 3$ ). The remaining participants identified as another ethnicity (2.4%;  $n = 17$ ), or chose not to respond to this question (4.7%;  $n = 33$ ). The majority of

participants were university students (92.4%,  $n = 597$ ), and participants had on average 16.70 years of education ( $SD = 8.975$ ).

Participants were recruited via social media sites including Facebook and Kijiji as well as recruitment emails that were sent to all students currently studying at Memorial University of Newfoundland. Recruitment emails and social media posts included a short description of the study and two links. The first link led participants to the survey while the second link led participants to a separate survey where they could submit their email address to be entered in a draw to win one of five \$50 gift cards. The surveys were kept separate to maintain participant anonymity and confidentiality.

### **Ethics**

All methods and procedures described in this study were completed in accordance with the Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans 2 (TCPS2) and were approved by the Interdisciplinary Committee on Ethics in Human Research (ICEHR).

### **Procedure**

Individuals who chose to participate in the study clicked on the link in either the recruitment email or social media post (see Appendix A), which directed them to the survey administered through the survey platform Qualtrics ([www.qualtrics.com](http://www.qualtrics.com)). Participants were first presented with an informed consent form (see Appendix B), which gave a more in-depth description of the study and what they would be asked to do. Given the online-nature of the survey, consent to participate was implied when a participant clicked a 'next' button underneath the statement "Click below to continue to survey". Following the informed consent form, participants were presented with one of four

randomly assigned vignettes describing a man named Jack (see Appendix C). The vignettes varied by ethnicity (Caucasian vs. First Nations) and treatment seeking intention (seeking treatment vs. not seeking treatment). Otherwise, the vignettes were identical. Participants were asked to read the vignette and respond to a series of questionnaires, including questions regarding their attitudes and opinions about the character. Following these questions, participants completed a measure of social desirability as well as a demographic questionnaire. Finally, participants were presented with a debriefing document (see Appendix D), which explained the purpose of the study.

### **Vignettes**

One of the most common methods used in stigma research related to mental health disorders is the vignette approach (Link, Yang, Phelan, & Collins, 2004). In this context, a vignette is a written passage that describes an individual with some form of mental disorder. Research participants are typically presented with a scenario and then asked to complete a questionnaire or series of questionnaires regarding the individual portrayed in the vignette or the topic of the vignette itself (e.g., McGinty et al., 2015). According to Link and colleagues (2004), vignettes have been particularly popular in stigma research for two reasons. First, compared to methodologies wherein participants are asked generic questions about mental health and related issues, vignettes allow researchers to present participants with more comprehensive and detailed stimuli. Second, research has shown that asking questions about a particular person with mental illness provides a more sensitive measure of stigmatizing attitudes than asking more general mental health questions (Corrigan et al., 1999). In addition, vignettes allow the



use of a random assignment to conditions of an experiment and are cost-effective to implement.

In the current study, participants were randomly assigned to read one of four vignettes, all of which depicted a man named Jack who was living with an AUD. The four vignettes were identical except for information which was modified to manipulate Jack's ethnicity and willingness to seek treatment. All four vignettes described Jack's symptoms and the way his alcohol use impaired his everyday life. Two vignettes indicated that Jack was a Caucasian man, and two indicated that Jack was First Nations. In one of each ethnicity conditions (i.e., one for "Caucasian Jack" and one for "First Nations Jack"), Jack refused to seek treatment following a charge of impaired driving and insisted that he did not have a problem. In the remaining two vignettes, Jack agreed to seek treatment following the impaired driving charge.

The vignettes were created by the researcher, using vignettes from previous studies as a guide. The vignettes included modified statements and concepts from other vignette studies such as McGinty and colleagues (2015), Sorsdahl and colleagues (2012), and Weine, Kim and Lincoln (2015). The researcher also referenced the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; American Psychological Association, 2013) to create the vignettes in such a way that described Jack as having clinically significant symptoms of AUD. For example, Jack exhibits two diagnostic criteria – tolerance and withdrawal – in the following statements:

...In fact, he had noticed that he needs to drink twice as much as he used to in order to get the same effect. If Jack went too long without having a drink, he

became very agitated, sweaty, and couldn't fall asleep, so he had another drink.  
(Appendix C).

### **Measures**

Following presentation of their assigned vignette, participants completed five distinct questionnaires. The first three questionnaires (Unpredictability-Incompetence Scale, Vignette-Social Distance Scale, & Vignette-Emotion Scale) were included as measures of stigma, to assess how the participant felt about Jack. The subsequent questionnaire – the Balanced Inventory of Desirable Responding (BIDR) – was included as a measure of pro-social responding. The BIDR was used to determine if one or more groups were attempting to respond in a socially acceptable fashion to a greater degree than the others. Finally, participants completed a demographic questionnaire, included to examine possible group differences based on demographic variables such as age or education level.

**Unpredictability-Incompetence Scale (UI; Angermeyer & Matschinger, 2004).** The UI is a self-report measure designed to assess the perceived unpredictability and incompetence of individuals with mental illness (see Appendix E). The UI was modified for this study to measure stigmatizing attitudes towards those with SUDs specifically. The scale has six items that are rated on a five-point scale ranging from 1 (*totally disagree*) to 5 (*totally agree*). The scores are compiled into one total score measuring unpredictability and incompetence, with higher scores signifying higher perceived unpredictability and incompetence. The UI scale has exhibited satisfactory factor structure and internal consistency in past studies (Angermeyer & Matschinger, 2004; Tippin, 2016). The UI had a Cronbach's alpha of .86 in the current sample.

**Vignette-Social Distance Scale (V-SDS; Penn et al., 1994).** The V-SDS is a seven-item self-report measure designed to assess the desired amount of social distance between the respondent and an individual with mental illness (see Appendix F). The items are rated on a four-point scale starting from 0 (*definitely willing*), followed by 1 (*probably willing*), 2 (*probably unwilling*), and 3 (*definitely unwilling*). The V-SDS is a modified version of the well-established social distance scale (SDS). The SDS is used as a proxy of stigmatizing behaviour towards individuals with mental illness. The V-SDS is administered following a vignette and directs the questions from the standard SDS towards the individual described in the vignette. All items on the V-SDS are combined into a total score with higher scores representing higher stigmatizing attitudes. The V-SDS has been found to have adequate internal consistency (Penn et al., 1994; Tippin, 2016). The V-SDS had a Cronbach's alpha of .86 in the current sample.

**Vignette-Emotion Scale (V-EMS; Penn et al., 1994).** The V-EMS is a self-report measure consisting of ten pairs of adjectives (e.g., empathetic vs. angry) anchored at the two ends of a seven-point scale, with the fourth point labelled as "neutral" (see Appendix G). Participants are asked to rate their emotional response to the individual with mental illness portrayed in the vignette based on this scale. Scores from all ten items are combined into a total score, with higher scores representing stigmatizing attitudes towards individuals with mental illness. The V-EMS has shown adequate internal consistency (Penn et al., 1994; Tippin, 2016). The V-EMS had a Cronbach's alpha of .92 in the current sample.

**Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1984).** The BIDR is used to assess respondents' attempts to appear socially desirable and readiness to respond

with positive bias (see Appendix H). The measure consists of 40-items, all rated on a seven-point scale (1 = *not true*; 7 = *very true*). The 40-items are broken into two 20-item subscales, the first being self-deceptive enhancement, and the second being impression management. Self-deceptive enhancement refers to when an individual responds honestly but in a positively biased, exaggerated way, while impression management refers to the act of intentionally choosing socially desirable responses. For the purposes of the current study, these two subscales were combined for preliminary analyses to examine group differences.

**Demographic Information** was collected at the end of the survey to prevent priming of participants with the concept of race/ethnicity. The demographic questionnaire asked participants their age, gender identity, relationship status, ethnicity, education level, and employment status. The demographic questionnaire used in this study can be found in Appendix I.

### **Statistical Analysis**

The survey data were first analyzed using descriptive statistics to characterize the sample in terms of demographic variables and scores on the study measures. To ensure there were no pre-existing differences between groups, the four groups were first compared on a series of demographic variables as well as social desirability as measured by the BIDR. Next, primary analyses included a series of ANOVAs to examine independent variable effects (i.e., the vignette character's ethnicity and the vignette character's choice to seek treatment or not). Specifically, three 2 x 2 factorial ANOVAs were included on outcome measures assessing stigma (i.e., the UI, the V-SDS, and the V-EMS). All statistical analyses described were completed using IBM SPSS Statistics

Software.

## **Results**

### **Analyses of Frequency of Missing Data**

Analyses of the frequency of missing data revealed that 58 participants completed at least one question, but were missing more than 90% of data. Due to the online nature of the survey, it was hypothesized that these individuals likely clicked on the survey link and decided to forfeit participation shortly after beginning the survey. These participants were removed from further analyses. For the 711 remaining participants included in data analysis, there was minimal missing data. As a result, in cases where a participant failed to respond to one item on a specific scale or subscale, the missing item was replaced with the participant's series mean (i.e., a calculated average of the participant's responses to the other items on that scale; Downey & King, 1998). However, on scales or subscales that a participant failed to respond to more than one item, the participant's scale or subscale score was not calculated.

### **Preliminary Analyses**

To examine group differences in demographics and prosocial responding, a series of chi-squares and ANOVAs were conducted. Demographic variables analyzed were age, gender, ethnicity, relationship status, and education level. There were no significant differences between groups on any demographic variables measured. In terms of socially desirable responding, there were no significant differences in BIDR scores between the four groups ( $F(3, 630) = 1.841, p = .138$ ), meaning that no group was more or less likely to respond in a socially desirable way compared to the others.

### Primary Analyses

Three 2 x 2 factorial ANOVAs were conducted to assess the effect of ethnicity and treatment seeking intention on outcome measures of stigma. Independent variables included ethnicity (Caucasian vs. First Nations) and treatment seeking intention (seeking treatment vs. not seeking treatment). The dependent variables were three measures of stigma that included the UI, V-SDS, and V-EMS. Levene's Test of Equality of Variances was not significant for any of the three outcome measures of stigma (UI:  $F = 0.799, p = .495$ ; V-SDS:  $F = 1.421, p = .235$ ; V-EMS:  $F = 2.245, p = .082$ ), meaning the error variance of the dependent variables were equal across the four groups.

Results of the first factorial ANOVA indicated a significant main effect of ethnicity on the UI. Specifically, participants presented with the First Nations vignettes ( $M = 17.865, SD = 4.858$ ) responded with significantly higher scores on the UI, ( $F(1, 707) = 16.617, p < .001, \text{Partial } \eta^2 = .023$ ), compared to participants who were presented with Caucasian vignettes ( $M = 16.479, SD = 4.942$ ). Results of the first factorial ANOVA also indicated a significant main effect of treatment seeking intention on the UI.

Participants who were presented with a vignette where Jack did not seek treatment ( $M = 18.015, SD = 5.072$ ) scored significantly higher on the UI ( $F(1, 707) = 21.750, p < .001, \text{Partial } \eta^2 = .030$ ) when compared to participants who received a vignette where Jack did seek treatment ( $M = 16.406, SD = 4.697$ ). There was no significant interaction between the factors of ethnicity and treatment seeking on the UI ( $F(1, 707) = .032, p = .859$ ).

Results of the ANOVA with the UI can be found in Figure 1.

Results of the second factorial ANOVA indicated a significant main effect of ethnicity on the V-SDS. Specifically, those presented with First Nations vignettes ( $M =$

14.981,  $SD = 3.798$ ) scored significantly higher on the V-SDS ( $F(1, 705) = 14.081, p < .001$ , Partial  $\eta^2 = .020$ ) compared to those who were presented with the Caucasian vignettes ( $M = 13.960, SD = 4.056$ ). Results of the second factorial ANOVA also indicated a significant main effect of treatment seeking intention on the V-SDS. Participants who received a vignette where Jack did not seek treatment ( $M = 15.076, SD = 3.852$ ) scored significantly higher on the V-SDS ( $F(1, 705) = 16.955, p < .001$ , Partial  $\eta^2 = .023$ ) compared to those who received a vignette where Jack did seek treatment ( $M = 13.926, SD = 3.977$ ). There was no significant interaction between the factors of ethnicity and treatment seeking on the V-SDS ( $F(1, 705) = 1.070, p = .301$ ). Results of the ANOVA with the V-SDS can be found in Figure 2.

Results of the third factorial ANOVA indicated a significant main effect of ethnicity on the V-EMS. Specifically, participants who read First Nations vignettes ( $M = 40.011, SD = 9.489$ ) scored significantly higher on the V-EMS ( $F(1, 697) = 16.283, p < .001$ , Partial  $\eta^2 = .023$ ) compared to participants who read a Caucasian vignette ( $M = 37.154, SD = 10.138$ ). Results of the third factorial ANOVA also indicated a significant main effect of treatment seeking intention on the V-EMS. Participants who received a vignette where Jack did not seek treatment ( $M = 39.741, SD = 10.161$ ) scored significantly higher on the V-EMS ( $F(1, 697) = 9.956, p = .002$ , Partial  $\eta^2 = .014$ ) compared to those who received a vignette where Jack did seek treatment ( $M = 37.535, SD = 9.559$ ). There was no significant interaction between the factors of ethnicity and treatment seeking on the V-EMS ( $F(1, 705) = 0.685, p = .408$ ). Results of the ANOVA with the V-EMS can be found in Figure 3.

### **Discussion**

The purpose of the current study was to examine whether public perceptions of individuals living with substance use issues, in particular, stigmas associated with SUDs, depended on Indigenous identity and treatment seeking intention. Participants answered questions based on one of four randomly assigned vignettes describing a man named Jack with an AUD who was portrayed as either Indigenous, specifically First Nations, or Caucasian and either willing to seek treatment or not willing to seek treatment. Results indicated that Jack was more highly stigmatized when he was portrayed as First Nations as compared to when he was portrayed as Caucasian. Results also demonstrated that Jack was stigmatized to a greater extent when he was described as not willing to seek treatment for his alcohol use compared to when he was described as willing to seek treatment. To the author's knowledge, this is the first study to have utilized randomly assigned vignettes to evaluate the stigma of substance use and how it specifically pertains to Indigenous peoples and individuals who do not seek treatment.

#### **Stigma Toward Indigenous People with Substance Use Issues**

In support of the first hypothesis, participants who understood Jack to be Indigenous desired more social distance from him, felt stronger negative emotions towards him, and viewed him as less competent and less predictable than participants who understood Jack to be Caucasian. Although these findings are disturbing, they are not surprising. There is a long-standing history of racism towards Indigenous peoples in Canada (Loppie Reading, 2014; Truth and Reconciliation Commission of Canada, 2015) and research has also shown that individuals living with substance use issues are among the most highly stigmatized groups of people (Corrigan et al., 2009; Schomerus et al.,



2010). Additionally, previous studies have reported that substance users who also fall into a racially marginalized group (e.g., African-Americans) experience a “double-stigma”, wherein they are stigmatized to a higher degree than substance users from non-marginalized backgrounds (Scott & Wahl, 2011).

Unfortunately, Canadians appear to be generally uninformed on Canada’s colonial history and its influence on Indigenous populations (Loppie Reading, 2014). This gap in historical knowledge is damaging not only for Indigenous peoples but for all Canadians in general. This lack of knowledge influences public policy, instills racist attitudes, and instigates animosity between Indigenous and non-Indigenous Canadians (Truth and Reconciliation Commission of Canada, 2015). Harding (2006) suggested that a lack of understanding of how Canada’s colonial history directly relates to the health and social disparities Indigenous peoples experience today leads people to place responsibility for these disparities on Indigenous peoples themselves. This tendency to view Indigenous peoples as solely responsible for the difficulties they currently face, coupled with the tendency to view individuals living with SUDs as responsible and at fault for having this mental health disorder, has resulted in negative stereotypes and beliefs centered around Indigenous peoples and substance use (e.g., the “drunk Indian” stereotype; Allan & Smylie, 2015; Merskin, 2001). Stereotypes such as the “drunk Indian” have substantial impact on Indigenous peoples in Canada and have had fatal consequences. In 2008, Brian Sinclair died in the emergency room of the Winnipeg Health Sciences Center after waiting 34 hours to receive treatment for a bladder infection (Allan & Smylie, 2015). Mr. Sinclair was an Indigenous man who had a history of substance use, homelessness, and lived with a cognitive impairment. Numerous staff members testified that they had

believed he was in the waiting room to keep warm and/or sleep off intoxication – he died after never receiving treatment for his bladder infection, and was not tended to until signs of rigour mortis had already set in. Mr. Sinclair’s death is a tragic example of how racism and negative stereotypes can lead to refusal of care and unacceptable treatment of Indigenous people.

Negative stereotypes of Indigenous substance use and the lack of historical knowledge may partially account for the ethnicity-based findings of the current study. If people adhere to the “drunk Indian” stereotype and have no understanding of Canada’s past relations with Indigenous peoples, they may be more likely to view an Indigenous person living with a SUD more negatively.

### **Stigma Toward Those who do not Seek Treatment for Substance Use Issues**

In support of the second hypothesis, participants who were informed that Jack did not seek treatment desired more social distance from him, felt stronger negative emotions towards him, and viewed him as less competent and less predictable than participants who were informed that Jack did seek treatment. These findings are in line with previous research that has found that portrayals of individuals choosing to seek treatment for mental disorders are viewed less harshly than depictions of those who do not seek treatment (McGinty et al., 2015). There are a several reasons why a portrayal of someone not seeking treatment would be viewed more negatively than a portrayal of someone seeking treatment. It is possible that individuals who have not sought treatment for their SUD are viewed more negatively than those who have because of a tendency for people to blame individuals for their SUD. Essentially, if SUDs are seen as a choice rather than a mental illness, it is harder to understand why someone would not choose to seek or accept

treatment. As previously discussed, there are a number of barriers to seeking treatment for those living with SUDs (Possemato et al., 2016), and individuals who have internalized the stigma surrounding their substance use may be particularly unlikely to seek help (von Hippel et al., 2018). Furthermore, it is also possible that the stigma associated with not seeking treatment is related to the stigma associated with symptomatic and untreated mental illness, as supported by findings that individuals with untreated and symptomatic mental illnesses are viewed more negatively than those with treated, asymptomatic mental illnesses (McGinty et al., 2015).

### **Implications**

When discussing the current findings, it is crucial to clarify how ethnicity and treatment seeking intention may intersect among Indigenous peoples living with substance use issues. Indigenous peoples seek treatment at lower rates compared to the general Canadian population (Marsh et al., 2015) and also tend to have higher rates of premature treatment dropout when they do seek treatment (Li et al., 2013). This lower rate of treatment seeking can be attributed to Indigenous individuals living with SUDs experiencing more barriers to receiving care than their non-Indigenous counterparts (Johnson & Cameron, 2001). First, due to past relations between Indigenous communities and the federal government, many Indigenous peoples may find it challenging to trust institutional health care providers and therefore may choose not to avail of it. Second, evaluating the mental health of Indigenous clients may be impeded by language barriers or cultural differences in symptom expression and interpretation between the clinician and client (Manson, Shore, & Bloom, 1985). Third, services are often only offered in urban areas, which may be inaccessible for Indigenous communities located in more

remote or rural areas (Aboriginal Affairs and Northern Development Canada, 2013; Boydell et al., 2006; National Collaborating Centre for Aboriginal Health, 2011). In short, all of these additional barriers mean that Indigenous peoples are often less likely to seek treatment for their SUD, a disorder which is already associated with a relatively low level of treatment seeking behaviour. The results of the current study suggest that Indigenous peoples living with SUDs are highly stigmatized based on their Indigenous identity regardless of treatment seeking status. Although Indigenous peoples are equally likely to be stigmatized for not seeking treatment as non-Indigenous Canadians, the added experience of race-based stigma notably raises the barrier for treatment, perhaps especially as that treatment may be much less accessible to Indigenous populations.

The results of this study provide valuable insight into the way that the public perceives individuals living with SUDs who identify as Indigenous and individuals who do not seek treatment for their SUD. Because stigma can negatively impact the lives of stigmatized group members, the findings that both of these groups are highly stigmatized have important implications for how targeted individuals cope with living with their disorder. Stigma acts as a barrier to seeking mental health treatment (Clement et al., 2015) and is related to a lower quality of medical care for targeted individuals (van Boekel et al., 2013). Stigma can also influence how professionals make decisions that will significantly impact the lives of individuals of stigmatized groups, such as probation officers being more likely to classify individuals living with SUDs as “high-risk” cases (Louden, 2009). Stigma has also been shown to impair one’s ability to find employment (Stuart, 2006) and live independently (Page, 1995). As such, being a member of a stigmatized group creates several barriers in an individual’s day to day life, and it is

crucial to identify these groups to make healthcare services and social supports more accessible for these populations (McKenzie, Dell, & Fornssler, 2016). Lastly, identifying highly stigmatized groups can lead to the development and implementation of anti-stigma interventions to target the stigma surrounding a given population (Urbanoski, 2017).

### **Anti-Stigma Interventions**

Results of the current study in conjunction with an understanding of the negative implications stigma can have on a stigmatized group indicate that the stigma surrounding substance use — specifically the race-based stigma surrounding Indigenous substance use — must be addressed. Likewise, the stigma associated with choosing not to seek treatment must be combatted to better support those living with SUDs.

Previous research on anti-stigma interventions suggests that one effective way to combat stigma is to elicit empathy among individuals with stigmatizing attitudes. For example, a study conducted by Batson and colleagues (1997) reported that inducing empathy for a member of a stigmatized group improved participant's attitudes towards the group as a whole. Eliciting empathy for an individual from a stigmatized group led to more positive attitudes towards highly stigmatized groups, including individuals living with AIDS, individuals who are homeless, and convicted murderers. Researchers have suggested that perspective-taking (Shih, Wang, Trahan Bucher, & Stotzer, 2009) and role playing (Stephan & Finlay, 1999) are effective ways of inducing empathy and subsequently reducing stigma and prejudice. For example, a study of the Photovoice<sup>3</sup>

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<sup>3</sup> Photovoice (Wang & Burris, 1997) allows members of marginalized groups to share their lived experiences through the use of photos and audio recordings. Individuals are asked to take photos that represent important aspects of their lived experience as a marginalized group member. The photos are then compiled into a slideshow with voiceovers which explain how each photo relates to the individual's lived experience.

video medium as an anti-stigma intervention to reduce mental illness stigma found that empathy mediated the relationship between the Photovoice intervention and subsequent reduction in mental illness stigma (Tippin, 2016). These results suggest that the intervention was effective in reducing mental illness stigma in part due to the empathy elicited among the participants. The Photovoice medium has been evaluated and modified for use among Indigenous communities as a means to create social change (Castleden, Garvin, & Huu-ay-aht First Nation, 2008).

Based on the results of the Aboriginal Awareness Survey conducted at Memorial University, the researchers suggested that education may be able to counter negative attitudes towards Indigenous Canadians (Godlewska et al., 2017b; Godlewska et al., 2017c). The researchers reported a distinct link between poor performance and negative responses, and likewise, a connection between better performance and positive and critical responses. One interpretation of this correlation is that knowledge is able to counter prejudicial attitudes. This finding aligns with previous research on racism and prejudice, wherein higher education levels are associated with lower levels of racist and prejudicial attitudes towards a marginalized group (Pedersen, Beven, Walker, & Griffiths, 2004; Pedersen, Griffiths, Contos, Bishop, & Walker, 2000; Pedersen & Walker, 1997). Furthermore, Corrigan and Penn (1999) indicated that educational interventions are a primary strategy used by advocacy, government, and public service organizations to minimize the impact of stigma on people living with mental illness, and Loppie Reading (2014) suggested that a promising way to instill anti-racist values is to implement educational programming that critically examines Canada's colonial history and the effects that it has had and continues to have on Canada's Indigenous populations. While

small steps have been made to implement Indigenous literacy and cultural competency into the education system in Canada, the current education system does not include a great deal of information regarding Indigenous peoples (Godlewska, Rose, Schaepli, Freake, & Massey, 2017a). Moreover, the information that is included in curricula is often inaccurate and does not acknowledge systemic racism towards Indigenous Canadians (Loppie Reading, 2014). The current state of Canadian curricula is concerning as non-Indigenous Canadians cite school and other educational institutions as the most common source of learning about Indigenous peoples (Environics Institute for Survey Research, 2016). Education is an integral part of the TRC Calls to Action. The TRC calls upon the federal, provincial and municipal government to implement Indigenous education throughout the Kindergarten to Grade 12 curriculum (Truth and Reconciliation Commission of Canada, 2015). The TRC also included calls to action for mandatory educational programming for medical students, nursing students, law students, lawyers, public servants, and management and staff in the corporate sector. The lack of education providing individuals with a critical perspective on Canada's colonial history may in part explain why Indigenous peoples in Canada experience a disproportionate burden of health disparities via racism and stigmatizing attitudes.

Based on previous research, interventions that elicit empathy in the participants in conjunction with providing Indigenous education would be a promising way to address racial prejudice towards Indigenous populations. The Blanket Exercise is a promising intervention as it appears to fulfill both of those requirements. The Kairos Blanket Exercise (KBE) was developed by Kairos, a Canadian multi-church based activism group (Kairos Canada, 2013). The exercise was developed following the 1996 Report of the

Royal Commission on Aboriginal Peoples, which identified education on Indigenous-Canadian history as a necessary piece in working towards reconciliation (Indigenous and Northern Affairs Canada, 2010). The KBE provides the history of Indigenous people in Canada in an interactive way, covering over 500 years of Indigenous history, including pre-contact, treaty-making, colonization, and resistance through a role play-like exercise (for an in-depth description of the KBE and its procedures, see Baldasaro, Maldonado, & Baltes, 2014). Kairos Canada (2013) claims that this exercise is effective due to its ability to create empathy in its participants. Previous research suggests that perspective taking can improve participant's social acceptance of stigmatized group members (Chung & Slater, 2013) and reduce racial prejudice (Vescio, Sechrist, & Paolucci, 2003). The KBE is a promising stigma-reduction strategy as it provides participants with an Indigenous perspective, while simultaneously providing historically accurate and critical information regarding Canada's colonial history. Still, the KBE has never been empirically evaluated as an anti-stigma intervention. Ongoing research into race-based stigma surrounding substance use may examine the extent to which the KBE can elicit meaningful and lasting attitude change.

A similar model could be employed to target the stigma surrounding substance use and treatment seeking intention by using an education-based intervention that elicits empathy. Ideally, an intervention to target the stigma surrounding substance use and treatment seeking intention would provide the audience with information on the etiology of SUDs and with a concurrent discussion on the relationship between trauma and substance use. An intervention of this nature would explain the complexities of SUDs and could, in turn, diminish the victim-blaming that often occurs when discussing individuals



living with SUDs. Furthermore, interventions that focus on the barriers to help-seeking and why individuals living with SUDs have lower rates of treatment utilization would hopefully provide context and perspective for the audience, leading to reduced stigma. Tippin (2016) effectively reduced stigma surrounding mental illness using the Photovoice video medium. Given that empathy mediated the relationship between the intervention and subsequent stigma reduction, Tippin (2016) concluded that the Photovoice video was effective in reducing stigma due to the empathy it elicited from the audience. Combining psychoeducation with an intervention such as the Photovoice video medium could result in meaningful stigma reduction with regards to substance use and treatment seeking.

### **Limitations and Future Directions**

This study has some limitations worth noting. First, the nature of the study resulted in the exclusive use of self-report measures. As responses to self-report measures can be influenced by social desirability bias, we included a measure of social desirability (see Appendix H) to detect any differences between groups in terms of desirable responding. In addition, the tendency to respond in a socially desirable way may be reduced using online surveys, which provide high participant anonymity and confidentiality (Joinson, 1999). There were no differences in BIDR scores between the four groups. Second, the current sample consisted of mainly university students, which means our results may not be as applicable to the general population. While recruitment methods were used to generate a sample from the general population, email recruitment through the Memorial University registrar's office was particularly effective, resulting in the majority of the sample consisting of university students. The consistency of our sample makes the results of the current study quite interesting, as a sample of generally

well-educated participants exhibited racial prejudice towards Indigenous peoples, in addition to the stigmatization of individuals who have not sought treatment for a SUD. Future research could study populations of varying education levels to examine the potential influence of education and related factors on Indigenous substance use stigma. Finally, the majority of our sample identified as Caucasian (80.7%), which may have led to biased responding. Future research may examine how individuals of other ethnicities perceive Indigenous peoples living with SUDs. Further studies may measure internalized stigma among Indigenous Canadians and its role in how other Indigenous peoples living with substance use issues are perceived.

### **Conclusions**

The current study examined the stigma associated with substance use and how that stigma is amplified for Indigenous groups and individuals who have not sought treatment. This evidence suggests that Indigenous peoples who use substances are viewed more negatively solely based on their Indigenous identity. Similarly, people in general who have not sought treatment for their substance use issues are viewed more negatively for doing so, despite the many barriers that make seeking treatment for substance use exceptionally difficult. These results provide insight into the way the public views some of its most vulnerable populations. Stigma acts as a barrier to treatment seeking and imposes enormous difficulties throughout the individual's day-to-day life. If these populations are exceptionally stigmatized, it will only be more difficult for them to reach out and receive the help they need.

Moving forward, steps must be taken to address the stigma surrounding substance use, in particular, the stigma surrounding Indigenous substance use and struggles

surrounding treatment seeking intention. To reiterate recommendations found in the TRC Calls to Action, educational content surrounding Canada's colonial history and its ongoing impact on Indigenous peoples must be included throughout the education system. By implementing this type of curricula, non-Indigenous peoples in Canada may gain a deeper understanding and appreciation for how and why Indigenous peoples in Canada experience certain health and social disparities. Through providing Canadians with an informed and empathic perspective, the stigma associated with Indigenous substance use and treatment seeking behaviour may be reduced. Furthermore, future research may develop and evaluate existing anti-stigma interventions (e.g., the KBE) for applicability to stigma surrounding Indigenous substance use. Reducing the stigma and negative attitudes targeted towards Indigenous substance use and treatment seeking behaviour would ideally assist in treatment seeking, adherence, and efficacy.

There is a large emphasis in the literature on the exceptionally poor health and wellness of Indigenous peoples in Canada, such that improving health outcomes for Indigenous peoples is a key recommendation in the TRC Calls to Action. However, the health and wellness of Indigenous peoples in Canada will not improve while we are still perceived as less than. In the interest of working towards reconciliation, attending to the ill-informed perceptions of Indigenous peoples in Canada is the only way forward.

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Figure 1. Ethnicity and treatment seeking intention as predictors of mean scores on the unpredictability and incompetence scale.

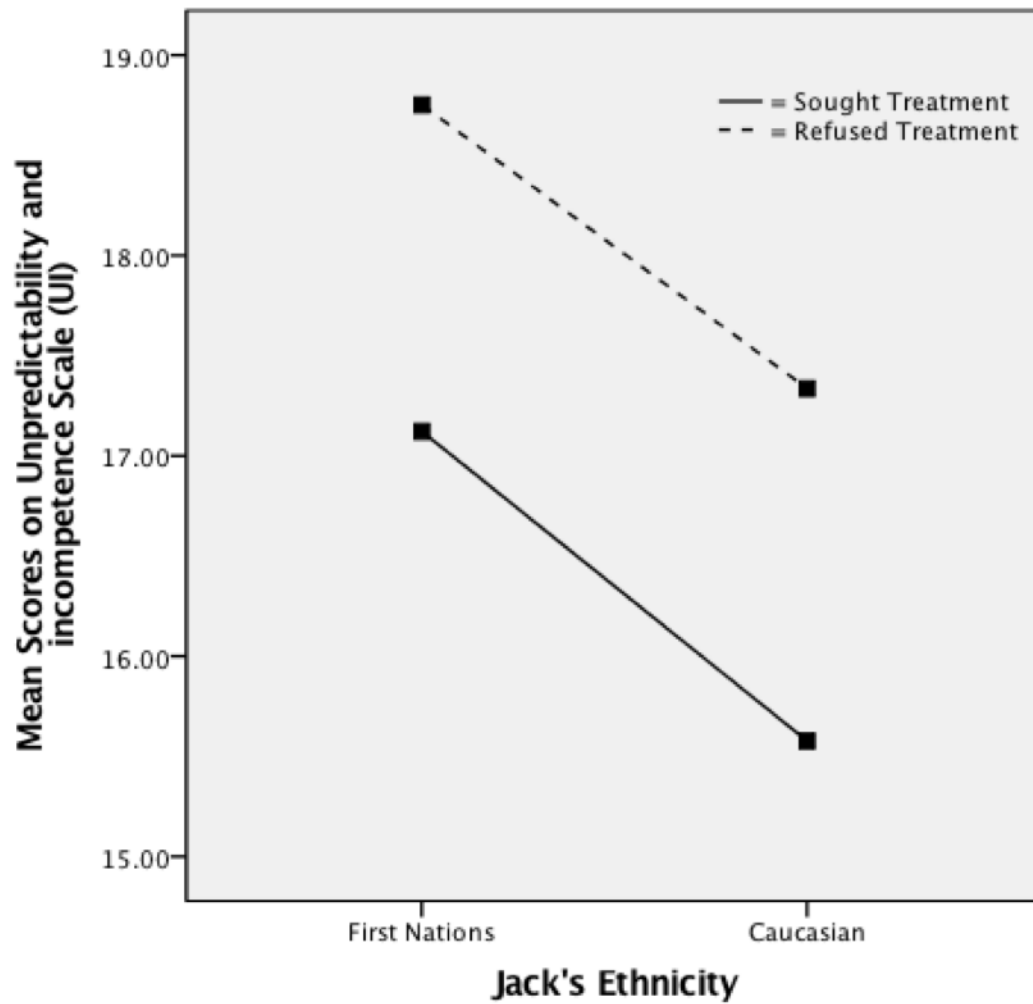


Figure 2. Ethnicity and treatment seeking intention as predictors of mean scores on the vignette-social distance scale.

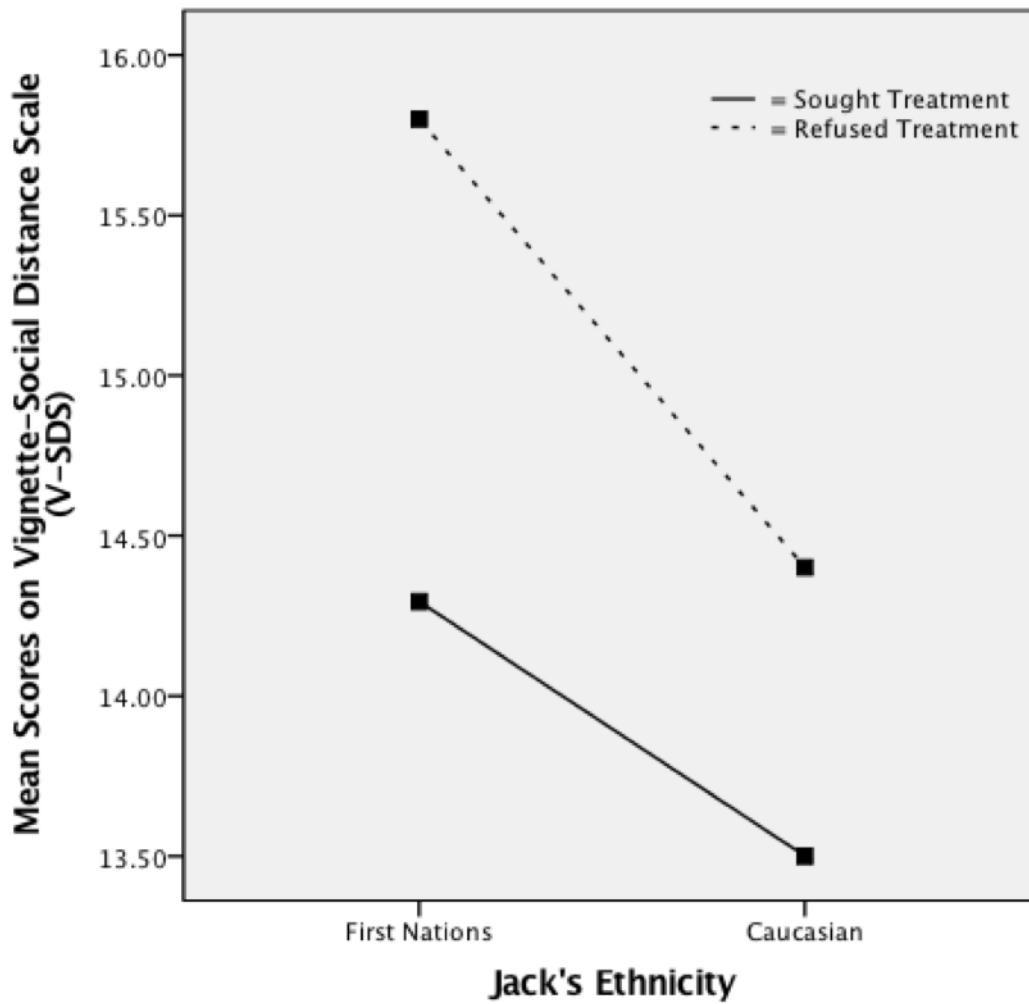
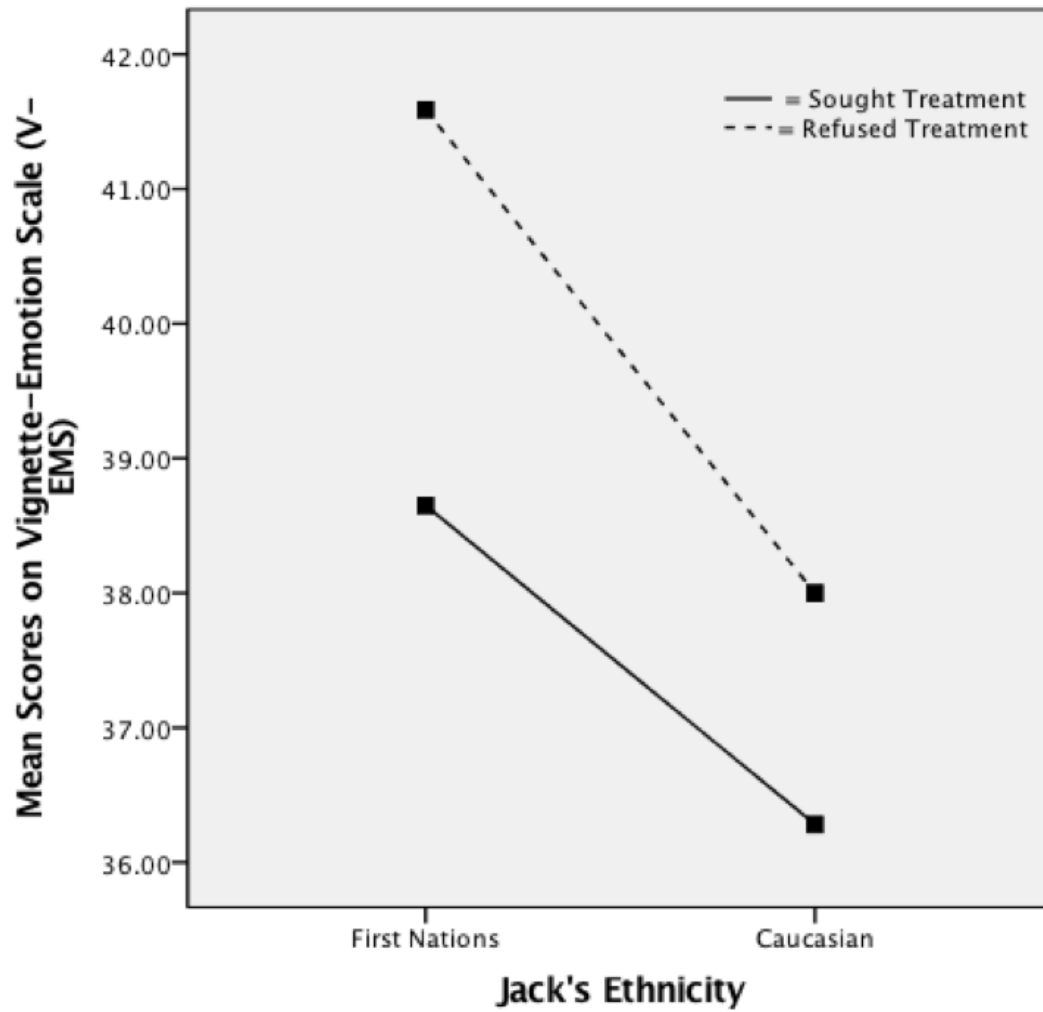


Figure 3. Ethnicity and treatment seeking intention as predictors of mean scores on the vignette-emotion scale.



## Appendix A: Recruitment Letter

**Introduction e-mail**

We would like to invite you to take part in a research study examining people's views and opinions about mental health and substance use related issues. The project is being conducted by myself, Emily Winters (graduate student at Memorial University) as part of my master's thesis, under the supervision of Dr. Nick Harris (Assistant Professor at Memorial University).

The overall purpose of this survey is to better understand public perceptions of mental health and substance use related issues. **In order to participate, you must be 19 years of age or older.** Participants will be asked to complete an online survey. Participation involves answering questions about your age, sex, relationship status, ethnic/racial heritage, and academic/employment status. You will also be asked to complete a series of questionnaires.

There will be no identifying information on the survey and all of your responses will be completely confidential. Participation is completely voluntary and the survey will take approximately 20 minutes to complete.

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as your rights as a participant, you may contact the Chairperson of the ICEHR at [icehr.chair@mun.ca](mailto:icehr.chair@mun.ca) or by telephone at 709-864-2861.

Click on the link below if you are interested in learning more about this project and potentially participating. You can also enter your e-mail address in a draw for a chance to win one of five \$50 gift cards as a token of appreciation. To ensure anonymity your e-mail address will be kept separate from the information you provide on the survey.

Please click on the below link to read more about the study and to see the survey:

[https://mun.az1.qualtrics.com/jfe/form/SV\\_7Umo3Z11uUMXEIB](https://mun.az1.qualtrics.com/jfe/form/SV_7Umo3Z11uUMXEIB)

Click on the link below to enter your e-mail address in a draw for a chance to win one of five \$50 gift cards.

[https://mun.az1.qualtrics.com/jfe/form/SV\\_4NGVJVJ8ckgi1eZ](https://mun.az1.qualtrics.com/jfe/form/SV_4NGVJVJ8ckgi1eZ)

Sincerely,

Emily Winters [ewinters@mun.ca](mailto:ewinters@mun.ca) &

Nick Harris [nharris@mun.ca](mailto:nharris@mun.ca)

## Appendix B: Informed Consent Form

**Informed Consent Form**

Title: Public Perceptions of Mental Health and Substance Use

Researchers: Emily Winters, B.Sc. (Hons)

Graduate Student, Department of Psychology  
Memorial University of Newfoundland  
email: [ewinters@mun.ca](mailto:ewinters@mun.ca)

Dr. Nick Harris, PhD, R Psych

Assistant Professor, Department of Psychology  
Memorial University of Newfoundland  
Phone: (709) 864-7676  
email: [nharris@mun.ca](mailto:nharris@mun.ca)

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**You are invited to take part in a research project entitled:**

*“Public Perceptions of Mental Health and Substance Use”*

This form is part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. It also describes your right to withdraw from the study. In order to decide whether you wish to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. This is the informed consent process. Take time to read this carefully and to understand the information given to you. Please contact the researchers, Emily Winters or Dr. Nick Harris, if you have any questions about the study or would like more information before you consent.

It is entirely up to you to decide whether to take part in this research. If you choose not to take part in this research or if you decide to withdraw from the research once it has started, there will be no negative consequences for you, now or in the future.

**Introduction:**

My name is Emily Winters and I am a graduate student in the Department of Psychology at Memorial University of Newfoundland. I am completing this study as part of my Masters thesis.

**Purpose of study:**

The purpose of this study is to examine people's views and opinions about mental health and substance use related issues. The results of this study will be used to further investigate mental health and substance use, help generalize existing findings, and explore areas with little research.

**Are you eligible to participate?**

To be eligible to participate in this study, you must be 19 years of age or older.

**What you will do in this study:**

In this study, you will be asked to complete an online survey. Participation involves answering questions about your age, sex, relationship status, ethnic/racial heritage, and academic/ employment status. You will also be asked to complete a series of questionnaires. Please note that during your participation in this study you may skip any questions that you do not want to answer.

**Length of time:** Completion of the online survey will take approximately 20 minutes.

**Withdrawal from the study:**

There are no consequences to withdrawing from the study. You are free to withdraw from the study at any time, up until the point when you submit your survey responses to the researchers. If at any time you wish to discontinue the survey, you can simply click the EXIT button, which will be present on each page. As there is no identifying information collected on the survey, once you submit the survey to us, it is not possible to identify your survey so it is not possible to remove it from the study. Should you decide to close the browser at any time during the study without submitting your survey, any responses will be lost and not included in the study.

**Possible benefits:**

Although you may not receive any immediate, direct benefits yourself, your participation will help us to better understand public perceptions of mental health and substance use related issues. Once the research from this study is compiled, we will share the report with all interested participants. If you would like to receive these results, please e-mail one of the researchers.

**Possible risks:**

During your participation in this study it is possible that you may become aware that you are struggling with a mental health or substance use related issue. If you have any concerns about your current mental health or psychological functioning, you can contact the Mental Health Helpline at 709-737-4668.

**Compensation:**

To thank you for your time, you may enter your e-mail address into a draw to win one of five \$50 gift cards. Please note that to ensure your anonymity your e-mail address will be kept separate from the information you provide on the survey.

**Confidentiality vs. Anonymity:**

There is a difference between confidentiality and anonymity: Confidentiality is ensuring that identities of participants are accessible only to those authorized to have access. Anonymity is a result of not disclosing participant's identifying characteristics (such as name or description of physical appearance).

**Confidentiality:**

Confidentiality will be ensured at all times. Only the researchers will have access to any and all data. As well, the researchers will have no way of knowing who, or who did not, complete a survey. No identifying information is requested through the survey.

**Anonymity:**

No identifying information will be included on the survey and all information presented or published from the results will be in aggregate form.

**Storage of Data:**

All data will be stored on a password-protected computer located in Dr. Nick Harris's lab on Memorial University campus. The researchers will be the only individuals with access to the data. Data will be kept for a minimum of five years as required by Memorial University policy on Integrity of Scholarly Research. Following this five-year period all data will be fully deleted. The online server, Qualtrics, hosting this survey stores all data on a server in Toronto, Ontario and thus is not subject to the US Patriot Act.

**Reporting of Results:**

The data collected will be compiled into a report and may be presented and published through peer reviewed forums, and will also be publically available through the QEII Library. These outputs will be a summary of the information obtained and will not include identifying features.

**Sharing of Results with Participants:**

Once the report is complete, it will be shared online via the following website:  
[www.uccs.mun.ca/~nharris](http://www.uccs.mun.ca/~nharris)

**Questions:**

You are welcome to ask questions at any time during your participation in this research. If you would like more information about this study, please contact Emily Winters or Dr. Nick Harris.

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at [icehr@mun.ca](mailto:icehr@mun.ca) or by telephone at (709) 864-2861.

**Consent:**

Your submitting the survey to the researchers means that:

- You have read the information about the research.
- You have been able to ask questions about this study, if so desired.
- You are satisfied with the answers to all your questions.
- You understand what the study is about and what you will be doing.
- You understand that you are free to withdraw from the study at any time, up until you submit the survey to the researchers, and that doing so will not affect you now or in the future.

If you submit the survey to the researchers, you do not give up your legal rights and do not release the researchers from their professional responsibilities.

By submitting the survey to the researchers, and thus consenting to participate in this study:

- I have read what this study is about and understood the risks and benefits. I have had adequate time to think about this and had the opportunity to ask questions, if so desired, and any questions have been answered.
- I agree to participate in the research project understanding the risks and contributions of my participation, that my participation is voluntary, and that I may end my participation at any time up until I have submitted my survey.

A copy of this Informed Consent Form can be printed for my records.

Please click below to proceed to the survey:

LINK to survey (next button)

## Appendix C: Vignettes

1: A description of a First Nations man named Jack, follows. Recently, Jack had started to drink much more than his usual amount of alcohol. In fact, he had noticed that he needs to drink twice as much as he used to in order to get the same effect. If Jack went too long without having a drink, he became very agitated, sweaty, and couldn't fall asleep, so he had another drink. Although his friends and family insisted that he drank too much, Jack argued that he remained in control. His family has complained that he is often hung-over, and has become unreliable. A few months ago, he was involved in a serious car accident, where he wrote off two cars. The police who arrived at the scene of the accident took his blood for alcohol analysis. As his alcohol level was much higher than the legal limit, he was charged with drunk driving. At that point, Jack's family encouraged him to see a doctor. Jack recognized that he needed help. With the help of his doctor, he sought out a detox program to address his problem.

2: A description of a First Nations man named Jack, follows. Recently, Jack had started to drink much more than his usual amount of alcohol. In fact, he had noticed that he needs to drink twice as much as he used to in order to get the same effect. If Jack went too long without having a drink, he became very agitated, sweaty, and couldn't fall asleep, so he had another drink. Although his friends and family insisted that he drank too much, Jack argued that he remained in control. His family has complained that he is often hung-over, and has become unreliable. A few months ago, he was involved in a serious car accident, where he wrote off two cars. The police who arrived at the scene of the accident took his blood for alcohol analysis. As his alcohol level was much higher than the legal limit, he was charged with drunk driving. At that point, Jack's family encouraged him to see a doctor. Jack refused, and insisted that he did not have a problem with alcohol.

3: A description of a Caucasian man named Jack, follows. Recently, Jack had started to drink much more than his usual amount of alcohol. In fact, he had noticed that he needs to drink twice as much as he used to in order to get the same effect. If Jack went too long without having a drink, he became very agitated, sweaty, and couldn't fall asleep, so he had another drink. Although his friends and family insisted that he drank too much, Jack argued that he remained in control. His family has complained that he is often hung-over, and has become unreliable. A few months ago, he was involved in a serious car accident, where he wrote off two cars. The police who arrived at the scene of the accident took his blood for alcohol analysis. As his alcohol level was much higher than the legal limit, he was charged with drunk driving. At that point, Jack's family encouraged him to see a doctor. Jack recognized that he needed help. With the help of his doctor, he sought out a detox program to address his problem.

4: A description of a Caucasian man named Jack, follows. Recently, Jack had started to drink much more than his usual amount of alcohol. In fact, he had noticed that he needs to drink twice as much as he used to in order to get the same effect. If Jack went too long without having a drink, he became very agitated, sweaty, and couldn't fall asleep, so he had another drink. Although his friends and family insisted that he drank too much, Jack argued that he remained in control. His family has complained that he is often hung-over, and has become unreliable. A few months ago, he was involved in a serious car accident, where he wrote off two cars. The police who arrived at the scene of the accident took his blood for alcohol analysis. As his alcohol level was much higher than the legal limit, he was charged with drunk driving. At that point, Jack's family encouraged him to see a doctor. Jack refused, and insisted that he did not have a problem with alcohol.



## Appendix D: Debriefing Form



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## Public Perceptions of Mental Health and Substance Use

**Researchers:**

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Thank you for participating in this study! Your participation and the data that you contribute are valuable and appreciated. This feedback sheet is intended to explain to you the purpose and hypotheses of the study in which you have just participated.

The purpose of this study was to better understand the stigma associated with Indigenous peoples struggling with SUDs, as well as the stigma surrounding those with a SUD who choose not to seek treatment. We did not include in the title, invitation, or consent form that this study was investigating views and opinions of Indigenous peoples. We did not disclose this information to avoid bias in the study responses and results.

Indigenous peoples in Canada struggle with SUDs and related issues at a disproportionate rate compared to other Canadians. In addition, mental illness, especially SUDs, are severely stigmatized. The stigma experienced by those struggling with a SUD can negatively impact their lives, and has been shown to decrease help-seeking behavior. To our knowledge, no research has been conducted examining the stigma surrounding Indigenous peoples with SUDs.

The information that you provided will shed light on areas for further research and will be used to contribute to existing literature.

You were asked demographic questions about your age, sex, relationship status, ethnic/racial heritage, and academic/employment status. You were also asked to complete questionnaires measuring your views on the vignette you were assigned. Once the report is complete, it will be shared online at [www.ucs.mun.ca/~nharris](http://www.ucs.mun.ca/~nharris).

During your participation in this study it is possible that you may have become concerned about your own current mental health or substance use. If you have any concerns about your current mental health or psychological functioning, you can contact the Mental Health Helpline at 709-737-4668. If you would like information on referrals to mental health and addiction services you can contact Eastern Health, Adult Central Intake at 709-752-8888.

We appreciate your participation in this study and hope that this has been an interesting experience. If you have any additional questions about this research, please contact graduate student Emily Winters at [ewinters@mun.ca](mailto:ewinters@mun.ca), or Dr. Nick Harris at (709) 864-7676 or [nharris@mun.ca](mailto:nharris@mun.ca)

If you have any ethical concerns about your participation in this study (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at [icehr@mun.ca](mailto:icehr@mun.ca) or at (709) 864-2861.

Once again, thank you for your participation in this study.

If you would like to learn more about research in this area, please see the following articles:

- Crisp, A. H., Gelder, M. G., Rix, S., Meltzer, H. I., & Rowlands, O. J. (2000). Stigmatisation of people with mental illnesses. *The British Journal of Psychiatry*, *177*, 4-7.
- Firestone, M., Tyndall, M., & Fischer, B. (2015). Substance use and related harms among Aboriginal people in Canada: a comprehensive review. *Journal of Health Care for the Poor and Underserved*, *26*, 1110-1131.
- Schomerus, G., Lucht, M., Holzinger, A., Matschinger, H., Carta, M. G., & Angermeyer, M. C. (2010). The stigma of alcohol dependence compared with other mental disorders: a review of population studies. *Alcohol and Alcoholism*, *46*, 105-112.
- Vogel, D. L., Wade, N. G., & Hackler, A. H. (2007). Perceived public stigma and the willingness to seek counseling: The mediating roles of self-stigma and attitudes toward counseling. *Journal of Counseling Psychology*, *54*, 40.

## Appendix E: Unpredictability-Incompetence Scale (UI)

	1	2	3	4	5	
Totally						Totally
Disagree						Agree

1. People like Jack are completely unpredictable.
2. People like Jack are not capable of making important decisions about their lives.
3. People like Jack definitely need a guardian.
4. You never know what a person like Jack is going to do next.
5. People like Jack are quick to lose their self-control.
6. People like Jack can't think logically.

## Appendix F: Vignette-Social Distance Scale (V-SDS)

Based on the description of Jack, please rate the following statements on the following Scale:

0                      1                      2                      3  
definitely willing   probably willing   probably unwilling   definitely unwilling

1. How would you feel about renting a room in your home to someone like Jack?
2. How about as a worker on the same job as someone like Jack?
3. How would you feel having someone like Jack as a neighbour?
4. How about as the caretaker of your children for a couple of hours?
5. How about having your children marry someone like Jack?
6. How would you feel about introducing Jack to a young woman you are friendly with?
7. How would you feel about recommending someone with a severe SUD for a job working for a friend of yours?

## Appendix G: Vignette-Emotion Scale (V-EMS)

If you were to interact with Jack, indicate how you would feel:

	1	2	3	neutral 4	5	6	7	
1. Pessimistic	1	2	3	4	5	6	7	Optimistic (R)
2. Tranquil	1	2	3	4	5	6	7	Anxious
3. Supportive	1	2	3	4	5	6	7	Resentful
4. Fearful	1	2	3	4	5	6	7	Confident (R)
5. Empathic	1	2	3	4	5	6	7	Angry
6. Disgusted	1	2	3	4	5	6	7	Sympathetic (R)
7. Apprehensive	1	2	3	4	5	6	7	Comfortable (R)
8. Irritable	1	2	3	4	5	6	7	Patient (R)
9. Relaxed	1	2	3	4	5	6	7	Tense
10. Calm	1	2	3	4	5	6	7	Nervous

## Appendix H: Balanced Inventory of Desirable Responding (BIDR)

Use the scale below for each statement to indicate how much you agree with it.

1	2	3	4	5	6	7
Not True			Somewhat True			Very True

1. My first impressions of people usually turn out to be right.
2. It would be hard for me to break any of my bad habits. (R)
3. I don't care to know what other people really think of me.
4. I have not always been honest with myself. (R)
5. I always know why I like things.
6. When my emotions are aroused, it biases my thinking. (R)
7. Once I've made up my mind, other people can seldom change my opinion.
8. I am not a safe driver when I exceed the speed limit. (R)
9. I am fully in control of my own fate.
10. It's hard for me to shut off a disturbing thought. (R)
11. I never regret my decisions.
12. I sometimes lose out on things because I can't make up my mind soon enough. (R)
13. The reason I vote is because my vote can make a difference.
14. My parents were not always fair when they punished me. (R)
15. I am a completely rational person.
16. I rarely appreciate criticism. (R)
17. I am very confident of my judgments.
18. I have sometimes doubted my ability as a lover. (R)
19. It's all right with me if some people happen to dislike me.
20. I don't always know the reasons why I do the things I do. (R)
21. I sometimes tell lies if I have to. (R)
22. I never cover up my mistakes.
23. There have been occasions when I have taken advantage of someone. (R)
24. I never swear.
25. I sometimes try to get even rather than forgive and forget. (R)
26. I always obey laws, even if I'm unlikely to get caught.
27. I have said something bad about a friend behind his or her back. (R)
28. When I hear people talking privately, I avoid listening.
29. I have received too much change from a salesperson without telling him or her. (R)
30. I always declare everything at customs.
31. When I was young I sometimes stole things. (R)
32. I have never dropped litter on the street.
33. I sometimes drive faster than the speed limit. (R)
34. I never read sexy books or magazines.
35. I have done things that I don't tell other people about. (R)
36. I never take things that don't belong to me.
37. I have taken sick leave from work or school even though I wasn't really sick. (R)
38. I have never damaged a library book or store merchandise without reporting it.
39. I have some pretty awful habits. (R)
40. I don't gossip about other people's business.

## Appendix I: Demographic Information

- 1) What is your age? \_\_\_\_\_
- 2) With which gender do you identify?
  - a. Male
  - b. Female
  - c. Transgender
  - d. Prefer not to say
  - e. Other – Please specify: \_\_\_\_\_
- 3) How would you describe your relationship status?
  - a. Single
  - b. In a relationship
  - c. Common Law/Married
  - d. Divorced
  - e. Widowed
  - f. Other – Please specify: \_\_\_\_\_
- 4) What is your ethnic background?
  - a. Caucasian/White
  - b. African-Canadian/Black
  - c. Hispanic/Latino
  - d. Asian
  - e. Indigenous (First Nation, Métis or Inuit)
  - f. Middle Eastern
  - g. East Indian
  - h. Other – Please specify: \_\_\_\_\_
- 5) How many years of education in total have you completed (including primary, secondary, high school, college, university, and post-graduate)?  
\_\_\_\_\_
- 6) Are you currently a university student? If yes, what year of study are you in?  
\_\_\_\_\_
- 7) Are you currently employed?
  - a. Not employed
  - b. Currently hold part time employment
  - c. Currently hold full time employment