COUNSELLORS’ ATTITUDES TOWARDS WORKING WITH CLIENTS WITH SUBSTANCE USE DISORDERS

by

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Counsellors’ Attitudes Towards Working with Clients with Substance Use Disorders

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Abstract
Substance Use Disorders (SUDs) are a significant and growing problem for Canadians; low rates of SUD treatment entry and retention suggest that our SUD treatment system requires improvement. Fear of being stigmatized by healthcare professionals is a barrier for treatment-seeking and, despite recent changes in societal attitudes towards substance use, individuals with SUDs continue to be stigmatized. Most counsellors are likely to see clients with SUDs during their careers and their attitudes towards these clients will strongly influence the therapeutic value of these encounters, which can range from helpful to harmful. Little is known about counsellors’ attitudes towards working with clients with SUDs and even less is known about the factors that contribute to them, thus providing a rationale for the current study. Counsellors were recruited from an online Canadian directory (n = 263) and data were collected using an online survey. To measure attitudes, the Medical Condition Regard Scale, modified for use with counsellors, was completed twice: once for clients with SUDs and once for clients with Major Depressive Disorder (MDD). Attitudes were mostly positive towards clients with SUDs, although 11 participants reported negative attitudes. A one-way repeated measures ANOVA found that overall scores were significantly more positive for the MCRS-MDD. However, the items of the MCRS-MDD that yielded more positive responses were all related to the difficulty of treating the disorder. We used one-way between-groups ANOVAs as well as bivariate correlation coefficients to determine which factors had significant bivariate relationships with MCRS-SUD scores. A standard ordinary least squares multiple regression was run to determine which of these variables still had an effect in the presence of the other statistically significant variables. Frequency of contact with clients with SUDs, workplace situational constraints, feelings of anger
towards people with SUDs, and age remained as significant variables. The implications of these findings for research and counselling training and practice are discussed.
Lay Summary

Despite the severity of the Substance Use Disorders (SUDs) problem in Canada, few people who need help pursue treatment, in part due to a fear of stigma from healthcare practitioners. Attitudes towards clients are important in the field of counselling, but little is known about counsellors’ attitudes towards their clients with SUDs as well as what factors affect these attitudes. The current study surveyed 263 counsellors about their attitudes towards working with clients with SUDs as well as a list of factors that have previously been found to affect these attitudes. Attitudes were found to be positive overall (despite 11 participants reporting negative attitudes) and the most important contributing factors were: frequency of working with clients with SUDs, workplace-related situational constraints, feelings of anger towards people with SUDs, and age. The implications of these findings for research and counselling training and practice are discussed.
Preface

This thesis was based on my original research idea and design. The survey portion was written by me; however, Dr. Anita Hubley provided significant assistance with the selection and subsequent adaptation of measures used in the survey as well as provided edits and assistance with creating the survey.

The online survey was set-up by my research assistant Julia O’Loughlin. Recruitment was conducted by me, with the help of my research assistant Sean Maxey. Sean also assisted with cleaning the data.

Analyses were designed by Dr. Anita Hubley and conducted by me, except for Factor Analysis, which was conducted by Dr. Hubley. Dr. Hubley consulted with Dr. Amery Wu and Dr. Bruno Zumbo to help with some of the analyses.

The thesis was written by me, with input from my supervisor, Dr. Anita Hubley, who provided revisions and edits for every section in the thesis.
Table of Contents

Abstract ................................................................................................................. iii
Lay Summary ........................................................................................................ v
Preface .................................................................................................................. vi
Table of Contents ............................................................................................... vii
List of Tables ......................................................................................................... vii
List of Figures ........................................................................................................ xi
Acknowledgements .............................................................................................. xii

Chapter 1: Introduction ....................................................................................... 1
  Research Problem .............................................................................................. 1
  Counselling and SUD Treatment ..................................................................... 2
  Previous Attitudes Research .......................................................................... 3
  Rationale for the Current Study ..................................................................... 6

Chapter 2: Previous Attitudes Research ............................................................ 8
  Preamble ............................................................................................................ 8
  Attitudes, Beliefs, and Stigma ......................................................................... 10
    How do attitudes affect quality of care? ....................................................... 11
    Stigmatizing attitudes. ..................................................................................... 12
    What leads to negative attitudes? ................................................................. 13
  Measures of Attitudes Toward Substance Use and Substance Users .......... 16
    Staff Attitudes Toward Alcoholism Questionnaire (SATAQ) ................. 16
    Marcus Alcoholism Questionnaire (MAQ) ................................................... 18
    Custodial Attitudes Inventory .................................................................... 20
    Semantic Differential ..................................................................................... 22
    Attitudes Toward Alcoholism Instrument (ATAI) ...................................... 22
    Alcohol and Alcohol Problems Perception Questionnaire (AAPPQ) .... 25
    Drug and Drug Problems Perception Questionnaire (DDPPQ) ............... 32
    Substance Abuse Attitudes Survey (SAAS) ............................................... 36
    Medical Condition Regard Scale (MCRS) ................................................ 41
    Summary ....................................................................................................... 43
  Historical Trends ............................................................................................... 44
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Strengths and Limitations</td>
<td>148</td>
</tr>
<tr>
<td>Concluding Statement</td>
<td>149</td>
</tr>
<tr>
<td>References</td>
<td>150</td>
</tr>
<tr>
<td><strong>Chapter 4: Conclusion</strong></td>
<td>156</td>
</tr>
<tr>
<td>Summary of Purpose, Research Questions, and Findings</td>
<td>156</td>
</tr>
<tr>
<td>Implications for Counselling</td>
<td>159</td>
</tr>
<tr>
<td>Study Limitations</td>
<td>163</td>
</tr>
<tr>
<td>Directions for Future Research</td>
<td>165</td>
</tr>
<tr>
<td>Concluding Statements</td>
<td>168</td>
</tr>
<tr>
<td>References</td>
<td>169</td>
</tr>
<tr>
<td>Appendix A: Recruitment Resources Table</td>
<td>197</td>
</tr>
</tbody>
</table>
## List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 3.1</td>
<td>Mean Performance on MCRS-SUD and MCRS-MDD</td>
<td>128</td>
</tr>
<tr>
<td>Table 3.2</td>
<td>Correlations between Work-related Variables and MCRS-SUD Scores</td>
<td>133</td>
</tr>
<tr>
<td>Table 3.3</td>
<td>Differences on the MCRS-SUD by Personal Experiences with SUDs</td>
<td>134</td>
</tr>
<tr>
<td>Table 3.4</td>
<td>Predictors of Counsellors’ Attitudes Regression Coefficients</td>
<td>137</td>
</tr>
</tbody>
</table>
List of Figures

Figure 2.1   Basic Role Requirements and the Components of Therapeutic Attitudes………26
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Chapter 1: Introduction

Research Problem

Substance use disorders (SUDs) are a serious global health issue, associated with many negative personal and societal consequences. People living with SUDs suffer from numerous deleterious effects, both physical and psychological, while society suffers from increased crime (Bennett, Holloway, & Farrington, 2008) and a strain on associated public funds (Rehm et al., 2006). SUDs are a significant problem in Canada, with over 1.5 million people, or 4.4% of the population, meeting the criteria for an SUD within the past year (Pirie & National Treatment Indicators Working Group, 2015). This high prevalence of substance abuse and addiction was estimated to cost Canadians $39.8 billion in 2002 (Rehm et al., 2006). The cost on human lives is also significant, with 4% of deaths worldwide, and 5.4% of the global burden of disease attributed to alcohol and illicit drug use per year (World Health Organization, 2009).

Unfortunately, with the increased use of fentanyl and its analogues in Canada, the death toll is only growing larger by the day, and although Canadian authorities have tried to curb the problem by supporting programs such as safe injection sites and easing regulations on the distribution of naloxone (a drug that counteracts the effects of opioid overdose), the current treatment system is proving itself to be insufficient to deal with a crisis of this magnitude.

Given the growing number of Canadians struggling with SUDs, the need for readily available and effective SUD treatment is becoming increasingly important, as is the need for those suffering from these disorders to access these services and to stay engaged in treatment for a sufficient amount of time to maintain a successful recovery. Although publicly funded SUD treatment is easily accessible to most individuals in the major urban centres of Canada, treatment entry rates remain quite low; one study, based on data collected between 2012 and 2013, found
that only around one in five Canadians with an SUD sought treatment within the previous year (Pirie & National Treatment Indicators Working Group, 2015). Treatment retention rates are similarly low: one study looked at patients enrolled in methadone maintenance therapy in British Columbia and found that after 36 months, only 20-25% of patients remained in treatment (Nosyk, Marsh, Sun, Schechter, & Anis, 2010). An Italian study, which used a representative sample of 5,417 heroin users, found that the probability of remaining in treatment after 179 days was only 50%. This study also found that treatment duration was a significant predictor of client reduction in heroin use and its related clinical and social problems (Salamina et al., 2010). Interestingly, this study also found that the presence of psychotherapy in the subject’s treatment program halved their risk of dropout (Salamina et al., 2010), suggesting that counsellors and psychotherapists likely provide a unique ingredient in SUD treatment that helps keep clients engaged and increases their chances of obtaining positive therapeutic outcomes.

**Counselling and SUD Treatment**

Research has consistently shown that counsellors play a vital role in the treatment of SUDs: counselling has been shown to be an effective SUD treatment when compared to waitlist and no treatment control groups (Burke, Arkowitz, & Menchola, 2003; Dutra et al., 2008; McCrady & Ziedonis, 2001). As well, counsellors are sometimes the first healthcare professional that a person suffering from an SUD comes into contact with when seeking treatment. For example, public substance use treatment clinics in British Columbia are staffed by intake counsellors who meet with new patients on their first clinic visit to help determine the best course of action for their treatment. This first encounter with the treatment system is a critical time for the client; a positive experience, where the person feels understood and not judged, could make the client much more likely to pursue treatment, while a negative experience, where
the client feels stigmatized, could deter the client from asking for further help. In fact, people with mental health problems in general often cite the fear of stigma as a major deterrent to seeking care (Schomerus & Angermeyer, 2008). Research has also shown that clients with SUDs who perceive stigma from their healthcare providers are significantly less likely to complete treatment and that negative clinician attitudes are associated with increased rates of treatment dropout and SUD relapse (Ball, Carroll, Canning-Ball, & Rounsaville, 2006; Brener, von Hippel, Kippax, & Preacher, 2010).

Among other factors, counsellors’ attitudes toward their clients who have SUDs can help predict how counsellors respond to their clients while in session and thus can affect the development of the therapeutic relationship: a factor that is widely considered to be essential to any type of counselling or psychotherapy (Gaston, 1990) and has been shown to predict treatment outcomes throughout a multitude of studies (Gaston, 1990; Martin, Garske, & Davis, 2000). Rogers (1957) argues that unconditional positive regard is an essential factor in the development of the therapeutic relationship; harbouring negative attitudes toward particular client groups could potentially undermine this important aspect of relationship-building, and it is not uncommon in our society for people to hold moralistic, stigmatizing, and judgemental views towards individuals with SUDs.

**Previous Attitudes Research**

A thorough review of the literature, conducted by the author, yielded 25 studies on counsellors’ attitudes towards clients with SUDs, completed over a period of 47 years. Studies that compared counsellors’ attitudes towards those of a norm group generally found more positive attitudes amongst the counsellors (e.g., Ferneau & Paine, 1972; Hart, 1975/76). When compared to other healthcare professionals such as physicians, nurses, and social workers, one
study found that counsellors were the least interested in working with alcoholics, had more pessimistic attitudes toward treatment outcomes, and were more likely to find alcoholics to be very demanding clients with whom to work (Weschler & Rohman, 1982). However, it is important to note that 90% of the counsellor group in this study reported that they did not believe they had sufficient education and training to work with the SUD population. When compared to their clients, two studies found that counsellors’ attitudes were in fact more negative and pessimistic (Nurco et al., 1987; Reinehr, 1969). However, another study that compared addictions counsellors to other groups of social and healthcare workers found the most positive attitudes towards substance users amongst the addictions counsellors (Carroll, 1993). A more recent study examined the attitudes of addictions educators and found that those participants who were also counsellors held less moralistic attitudes toward substance users overall (Broadus, Hartje, Roget, Cahoon, & Clinkinbeard, 2010).

In general, counsellors were found to have mostly positive attitudes towards their clients with SUDs (e.g., Ball et al., 2002; Kahle & White, 1991; Rodgers-Bonnacorsy, 2010) and the literature suggests that the presence of negative attitudes seems to be declining over time. However, most studies conducted on this topic did find a significant minority of counsellors who held stigmatizing and stereotypical attitudes and beliefs about the substance-using population. Some studies also found counsellors who reported feeling uncomfortable being around people with SUDs (e.g., Kahle & White, 1991). Despite the fact that counsellors who harbour negative attitudes appear to be in the minority, these negative attitudes still have the potential to do a great deal of harm, as it is very likely that these counsellors will end up having sessions with clients with SUDs, if not by choice, then simply by chance. To help reduce the amount of negative
experiences that clients with SUDs have with their counsellors, it is essential for us to have a better understanding of the factors that affect counsellors’ attitudes.

In the current literature, there are only three factors that have been consistently studied in counsellors as possible predictors of attitudes: substance use related education, work experience, and previous history with addiction (both personal experience and the experience of having a loved one with an SUD). Education was consistently found to have a positive effect on attitudes (e.g., Balich, Warren, Weatherford, Zakaria, & Sneed, 2015; Broadus et al., 2010; Caplehorn, Hartel, & Irwig, 1997; Carroll, 1993; Davis, Sneed, & Koch, 2010; Forman, Bovasso, & Woody, 2001; Hunot & Rosenbach, 1998; Muldoon, 1998; Wechsler & Rohman, 1982; West & Miller, 1999), as was experience working with (e.g., Caplehorn et al., 1997; Dunston-McLee, 2001; Forman et al., 2001; Hunot & Rosenbach, 1998) and frequency of occupational contact with the SUD client population (Dunston-McLee, 2001). Personal experiences with SUDs, such as having personally struggled with an SUD, or having had an experience with a friend or family member with an SUD, were also found to have a positive effect on attitudes (e.g., Davis et al., 2010; Koch, Sneed, Davis, & Benshoff, 2006, LoSciuto, Aiken, Aussets, & Brown, 1984). It is important to note that participants in many of these studies reported that they did not feel that they had received sufficient education and training to work with the SUD population. This is a common finding not only in the literature on counsellors, but in the literature on healthcare professionals in general (van Boekel, Brouwers, van Weeghel, & Garretsen, 2013).

Several other factors were studied as possible predictors of counsellors’ attitudes, although not consistently. Nurco et al. (1987) looked at work setting and found that employees of addiction treatment centres that offered methadone maintenance treatment for opioid use disorder had more positive attitudes than their counterparts who worked at abstinence-based
clinics. Hunot and Rosenbach (1998) found more positive attitudes amongst volunteer alcohol counsellors who reported higher levels of support and recognition in their positions. They also found a positive correlation between age and positive attitudes.

The literature on the attitudes of healthcare professionals in general towards working with the SUD population is considerably more substantial than the literature that focuses on counsellors. These studies suggest that there are other factors besides those mentioned above that likely affect attitudes. The most salient factors that were investigated include situational constraints related to one’s particular job (negative effect; e.g., Albery et al., 2003), confidence and perceived competency working with the SUD population (positive effect; e.g., Van Kampen, 2010; Watson, Maclaren, & Kerr, 2006), the current and previous substance use behaviour of the participant (mixed results; e.g., Robinson, Roth, Gloria, Keim, & Sattler, 1993; Crothers & Dorrian 2011), negative affect associated with people who have SUDs (negative effect; e.g., van Boekel, Brouwers, van Weeghel, & Garretsen, 2014), and causative beliefs about addiction, such as attribution of responsibility (negative effect; e.g., van Boekel et al., 2014) and perceived controllability (negative effect; e.g., Brener et al., 2010).

**Rationale for the Current Study**

Research on healthcare providers in general has consistently shown that the attitudes held by SUD treatment providers toward their clients are significantly correlated to treatment entry, retention, and success (van Boekel et al., 2013). Unfortunately, relatively few studies on attitudes have focused on counsellors and the studies that did focus on counsellors often used attitude measures with poor reliability of scores; some studies also used measures that focused more on beliefs than attitudes. This raises questions about the overall findings of these studies. There is also a lack of studies that have focused on the predictors of counsellors’ attitudes – that is,
factors that would be valuable to investigate if we want to see any positive changes in these attitudes.

It is also important to note that there is a lack of recent research on this topic and that counsellors’ views may have changed significantly in the last few years due to several factors. For one, the societal conversation around addictions has become more progressive in recent years; the moralistic views that were once prevalent in society are becoming less popular and recent scientific findings are pointing to a more complex etiology of addiction that includes biological, psychological, and societal factors (Griffiths, 2005). The legalization of cannabis in some U.S. states, the impending legalization of cannabis in Canada, as well as the decriminalization of all drugs in countries such as Portugal and Uruguay reflect the changing narrative of SUDs in our society; governments are moving away from treating substance use as a moral issue that needs to be punished and are shifting the focus towards treating it as a public health issue instead. Finally, the opioid crisis has become so widespread that the average person probably knows someone who has been affected by it; this makes it much more difficult for people to write off substance users as morally bankrupt individuals who are nothing but a drain on society. Given the lack of recent research on counsellors’ attitudes toward clients with SUDs and the factors that contribute to these attitudes, as well as the importance of counsellors’ attitudes to the success of SUD treatment, there is clearly a gap in the literature that needs to be filled. The current study was conducted to help fill this gap.
Chapter 2: Previous Attitudes Research

Preamble

The bulk of this literature review will focus on studies that looked at the attitudes of counsellors, healthcare professionals, students, and various other professional and non-professional groups toward individuals with substance use issues. It should be noted that the terminology related to substance misuse and addiction has changed over the years; for the most part, I have preserved the language found in the original research I am describing. Terms such as alcoholic, problem drinker, addict, drug addict, substance use, substance misuse, and substance abuse do all have different meanings and connotations, but many of the studies in this literature review did not define their terms, nor did they make an effort to distinguish between them. Many of these terms were often seemingly used interchangeably in much of the literature. There is a common thread that runs across these terms, however, and that is that they are often associated with stigmatizing and stereotyping attitudes.

Many of the studies described below make reference to several models of addiction: moral, disease, and biopsychosocial. The moral model of addiction has its roots in religion and is used to justify punitive governmental policies, such as the mass incarceration of substance users seen in the USA’s ‘War on Drugs’ (Humphreys & Rappaport, 1993). This model holds that addiction is a choice made by the substance user as a result of their lack of morality and ignores the effects of external factors such as biology, adverse childhood events, and societal pressures. As a result, those who adhere to the moral model of addiction often believe that substance users should be punished rather than helped. The disease model holds that addiction is an incurable disease of the brain that causes the addicted individual to essentially lose control of their substance use behaviour. This model holds that addicted individuals are not responsible for their
addiction, but also that they are powerless against it and that they must enlist the help of others to keep the symptoms of their disease at bay. Those who adhere to this model of addiction believe that addicted individuals require treatment, not punishment. It should be noted that some people hold beliefs from both the moral and disease models of addiction. Finally, the biopsychosocial model holds that addiction is caused by the interaction of a number of internal and external factors, including one’s biology, social support system, psychological makeup, and social status. For example, the biopsychosocial model would suggest that an individual who has a history of addiction in their family, is subjected to a traumatic childhood, does not have a good social support system, has a tendency to become anxious and depressed, lives in poverty, and learns to cope with stress by using substances, has a much higher chance of developing an SUD than the average person. Practitioners who adhere to this model would be more likely to look at an addicted client’s life as a whole and to see addiction as a symptom of the many other problems in the client’s life. Unlike the disease model, the biopsychosocial model does not view addiction in a deterministic light; rather, it recognizes the context of addiction while, at the same time, recognizes the power of the client to make a change.

It should be noted that the literature is also not particularly clear when it comes to defining attitudes; many studies seemed to take for granted that their particular measure was, in fact, measuring attitudes. The various conceptions of attitudes found in these studies were, in a way, defined by their measures. Few studies used a theory of attitudes on which to base their measures. The line between attitudes and beliefs in the literature was often blurred, with some measures including beliefs as a part of attitudes, and others treating them as two distinct constructs. For the purposes of the current study, I will use the multicomponent model of attitudes, also known as the CAB model, as a theoretical framework (Eagly & Chaiken, 1993;
Zanna & Rempel, 1988). This model holds that attitudes are comprised of three main components: cognition, affect, and behaviour. The cognitive component of attitudes includes the beliefs, thoughts, and attributes that one associates with a given attitude object (person, place, or thing). The affective component refers to the feelings and emotions that are associated with the object. The behavioural component refers to the inferences one makes about their attitude toward an object, based on their previous experiences with, or behaviours toward, that object. This component is often emphasized when a person is unsure about their attitude toward something; instead of relying on their thoughts and feelings toward the object, the person looks to their past behaviour towards it and infers what their attitude must be, based on that behaviour (Bem, 1972). However, some of the studies in this literature review treated beliefs and affect as potential predictors of attitudes, rather than as aspects of attitudes, so I have chosen to present the results of these studies in a manner consistent with the original research.

I will begin by describing attitudes, stigmatization, and related theories. Then, given the many disparate ways in which attitudes have been treated in the literature, I will describe the most commonly used measures of attitudes. This will assist the reader in understanding the studies described in the sections that follow.

**Attitudes, Beliefs, and Stigma**

The online Oxford English Dictionary (2009) defines an attitude as “a settled way of thinking or feeling about someone or something, typically one that is reflected in a person’s behaviour.” Given this definition, one could conclude that attitudes held by healthcare workers likely affect, either implicitly or explicitly, the way in which they interact with their clients. This conclusion is supported in the literature. For example, a study on physicians found that having negative attitudes towards patients with AIDS greatly increased the likelihood of the physician
pursuing less aggressive treatments and displaying avoidant clinical behaviours when working with HIV positive patients (Yedidia & Berry, 1999). These attitudes are also perceived by clients, as evidenced by Luoma et al. (2007), who found that people receiving treatment for substance use frequently perceived stigmatized attitudes from their healthcare providers.

Attitudes should not be conflated with beliefs, as this can easily cause confusion when trying to understand the literature. Beliefs are a part of the cognitive component of attitudes and represent a state of mind in which a person thinks something to be true, irrespective of any empirical evidence to support or refute that thing. Beliefs are an aspect of attitudes and can affect other aspects of attitudes (e.g., affect and behaviour), but they should not be confused with attitudes on a conceptual level.

**How do attitudes affect quality of care?** There are several theories to explain how negative clinician attitudes lead to their associated detrimental effects. One theory suggests that negative attitudes held by practitioners, along with their accompanying beliefs and prejudices, can be unwittingly imposed on clients by clinicians, resulting in reduced collaboration between the two parties, and a reduction in the client’s feelings of empowerment and self-esteem (Curtis & Harrison, 2001). Negative attitudes enacted by clinicians can also cause a reduction in the clients’ feelings of self-efficacy, a trait that has been shown to be a significant predictor of recovery from addiction (Schomerus et al., 2011). If a client is treated by a professional who is less than optimistic about the chances of the client’s recovery, it would not be surprising if the client also incorporated this belief of low self-efficacy into their own self-concept. Another theory suggests that practitioners’ negative attitudes lead to poor communication, thus hindering the development of the therapeutic alliance (Palmer, Murphy, Piselli, & Ball, 2009).
Research has supported the notion that clinicians, in order to develop positive therapeutic attitudes and sufficient empathic capacity for working with drug users, should explore and question the assumptions and biases that inform their attitudes towards this population (Ballon & Skinner, 2008). Without doing so, negative attitudes and biases could result in the development of stigma, a major barrier to treatment seeking and success.

**Stigmatizing attitudes.** People living with SUDs undoubtedly face many challenges in their lives, and it would be difficult to refute that these challenges are significantly magnified by stigma. Merriam-Webster’s online dictionary (2011) defines stigma as “a set of negative and often unfair beliefs that a society or group of people have about something.” The literature on stigma provides a more in-depth definition. Luoma et al. (2007) investigated the role of stigma in individuals receiving treatment for substance abuse and found evidence to support the existence of three distinct forms of stigma: enacted stigma, perceived stigma, and self-stigma. Enacted stigma refers to external manifestations of stigma, such as difficulty finding housing or employment, poor treatment support, and interpersonal rejection. Perceived stigma refers to the beliefs that an individual, who identifies as part of a stigmatized group, holds about the prevalence of stigmatizing attitudes and actions in society. Finally, self-stigma refers to the negative thoughts and feelings, and their resultant behaviours, held by people who belong to a stigmatized group.

**Effects of stigma.** Some of the negative thoughts and feelings that stigmatized individuals experience are fear, shame, and negative self-evaluative thoughts. This can lead to the avoidance of healthy behaviours such as treatment seeking, searching for employment, and developing intimate relationships (Luoma et al., 2007). For example, a likely reason for the low rate of treatment entry seen among those suffering from SUDs is the fear of being stigmatized or
reacted to negatively by the professional with whom they seek help. In fact, people with mental health problems in general often cite this very reason as a major deterrent to seeking care (Schomerus & Angermeyer, 2008).

Clients with SUDs who do seek treatment are also affected by stigma. Those who perceive discrimination from healthcare professionals are less likely to complete treatment and those whose clinicians have a negative attitude towards them are significantly more likely to drop out of their treatment program or to relapse (Ball, Carroll, Canning-Ball, & Rounsaville, 2006; Brener et al., 2010). In fact, one study found that clients who reported having any sort of experience with stigma during their treatment process were significantly less likely to recover from their disorder (Luoma et al., 2007). These findings seem to make sense, as people with SUDs who seek treatment are in a vulnerable position, and having their self-stigmatizing attitudes reinforced by the very people with whom they are trying to seek help would likely be a very unpleasant experience that they would not want to repeat.

**What leads to negative attitudes?** Researchers suggest three major paradigms to explain the prominence of stigma in our culture, as explained by Corrigan (1999). The first paradigm involves sociocultural perspectives of stigmatized groups, which become skewed to help justify existing inequalities in society. The second paradigm stems from motivational biases, which develop on a personal level to meet an individual’s basic psychological needs. Finally, social cognitive theories explain stigma as the result of an individual’s processing of human knowledge structures. Efforts to attenuate stigma have generally focused on this third factor, because it has been shown to be the easiest and most realistic factor to manipulate (Corrigan, 2000). I will now outline two of the most important social cognitive theories about stigma.
The contact hypothesis. One straightforward way to change our cognitions about stigmatized groups is to have more contact with them. Williams (1947) was the first academic writer to describe the contact hypothesis, which is an intuitive explanation of how increased contact between people from non-stigmatized and stigmatized groups leads to a general reduction in the stigmatizing attitudes, beliefs, and behaviours held by the former towards the latter. The hypothesis holds that the negative attitudes and stereotypes held by the in-group are a result of ignorance, and that first-hand experience with the out-group will disconfirm their stereotypes, thus improving their attitudes.

The hypothesis has been supported in the literature, as evidenced by a meta-analysis by Pettigrew and Tropp (2006) that found a robust effect of contact on attitudes, even in the most rigorous studies, and in the absence of optimal conditions. Although the contact hypothesis has traditionally focused on face-to-face interactions, it has also been shown that other modalities of contact, such as observation in a public setting, media coverage, and conversations with friends and family, are effective in changing attitudes (Lee, Farrell, & Link, 2004). The authors of this study also suggest that geographical and institutional variables can play a role, such as the prevalence of members of the out-group in the in-group’s neighbourhoods and schools, or the presence or absence of housing discrimination in a given location.

In the context of SUD treatment providers, the contact hypothesis has far-reaching implications. The hypothesis supports the notion that a multitude of clinician factors (i.e., factors that determine the amount of contact a counsellor has with the SUD population) may play an important role in determining attitudes towards working with clients with SUDs, including but not limited to: amount of direct contact with the SUD population (both personal and professional); current and past work setting; attitudes held by coworkers, family, and friends;
history of substance use; current habits of alcohol and drug use; amount and type of training and education; socioeconomic status; place of birth; neighbourhood of residence; schools attended; and family history. This list is by no means exhaustive but attempts to include factors that measure both direct and indirect contact with the SUD population.

**Attribution theory.** Attribution theory, as described by Weiner (1986), is a model used to explain human motivation and emotion based on the assumption that people tend to search for a causal understanding of an event to better understand or explain the event. Research has shown that there are two factors that play a prominent role in the development of peoples’ attributions: stability and controllability (Weiner, Perry, & Magnusson, 1988). For instance, if a person views a factor as stable and unlikely to change, then they will be likely to have cognitions and display behaviours that reflect this belief. In the context of substance use, if a practitioner believes that SUDs are a chronic disease that cannot be changed, it would follow that they would probably be less optimistic about treatment outcomes for people with this disorder, and this belief would likely be reflected in the treatment of their client. Controllability refers to the degree of control an individual has over their situation: if perceived controllability of an SUD is high, then it would follow that the attributions of blame and responsibility to the individual in question would also be high, and the resulting attitudes would likely be negative. However, if a practitioner holds that their client has high controllability of their disorder, they may also hold a more positive attitude in relation to treatment optimism. The contact hypothesis and attribution theory allow us to better understand how attitudes are formed, but how do we measure these attitudes quantitatively?
Measures of Attitudes Toward Substance Use and Substance Users

There have been many scales created over the years designed to measure attitudes toward substance use, substance users, and SUDs, in their various forms. Some of these measures have been thoroughly investigated and used in multiple studies, while others were designed by study authors, solely for use in their respective studies. Forty-six of these author-written measures were found in the literature review; they did not have accompanying psychometric evidence, were often written for use with specific populations not relevant to the current study (e.g., methadone clinic employees) and are not available for use through the internet or the UBC library. As such, they will not be described in the following section. Eighteen other measures were found that will also not be described, for the same reasons that the author-written measures will not be described. This section will present the nine most commonly used instruments for measuring attitudes in professionals and students. While commonly used measures that include items tapping into both attitudes and beliefs have been included, I have excluded measures that focus solely or clearly on beliefs rather than attitudes (e.g., Addiction Belief Scale (Schaler, 1995); Addiction Belief Inventory (Luke, Ribisl, Walton, & Davidson, 2002)). Although beliefs are an aspect of the cognitive component of attitudes, according to the CAB model, they are not attitudes in and of themselves; therefore, measures that focus exclusively on beliefs are not suitable for measuring attitudes.

Staff Attitudes Toward Alcoholism Questionnaire (SATAQ). One of the first scales developed for measuring attitudes was the Staff Attitudes Toward Alcoholism Questionnaire

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1 The Counselor Trainee Attitudes Measure (CTAM; Koch, Sneed, Davis, & Benshoff, 2006) is an exception. This measure was created for the relevant population but will not be included because it is not accessible through the internet or the UBC library. As well, the authors of this scale did not respond to email requests for a copy of the scale.
(Sterne & Pittman, 1965). The scale was developed using a group of 115 administrative and non-administrative staff at several clinics, agencies, and hospitals in St. Louis, U.S.A. that provided care, at least part of the time, to patients with alcohol use issues. Participants were asked to rate 29 items from 0 (strongly disagree) to 4 (strongly agree). The scale was divided into two sections; the first section measured optimism and pessimism with regard to the treatability of alcoholism and, more generally, the likelihood of recovery or improvement. The second section measured participants along a moralism and a disease dimension. This section included questions about beliefs regarding the definition and etiology of alcoholism, ideal treatment programs for alcoholics, and alcoholics’ amenability to treatment. High moralism scores equate with having a condemnatory attitude towards alcoholics, believing that alcoholism is a self-inflicted failure caused by a moral weakness, and that a therapeutic approach to alcoholic patients is unwarranted because they will most likely not get better. High disease scores mean that the participant is more illness oriented in his or her beliefs about alcoholism; people with high disease scores believe that alcoholism is an involuntary illness with a multi-faceted etiology, and that an ideal treatment program for alcoholism emphasizes a psychosocial aspect.

The scale was also used by Mogar, Helm, Snedker, and Wilson (1969) with a group of professional and nonprofessional hospital employees. Rosenbaum (1977) used a scale that was based on the SATAQ with a group of nurses, and Bailey (1970) also used the SATAQ as a model for a scale that she made to use with social workers. No psychometric evidence was provided in any of these studies.

Psychometric data for this scale is lacking in general. Sterne and Pittman (1965) compared results on their questionnaire with in-depth interviews conducted with the same participants and found that the interviews reflected the survey results. They claimed that this
showed good validity, although they did not have any other evidence of validity in addition to these interviews. Another major problem with the validity of this scale involves the finding that moralistic and disease-oriented beliefs are not on opposite ends of a spectrum. As later studies showed, belief in alcoholism as an illness does not preclude moralistic judgements of alcoholics (e.g., Engs, 1982; Gassman, 1997; Kahle & White, 1991; Rosenbaum, 1977; Wechsler & Rohman, 1982). Given the SATAQ’s outdatedness and lack of supportive psychometric data, neither this scale, nor modified versions of it, have been used since the 1970s.

**Marcus Alcoholism Questionnaire (MAQ).** One of the more commonly used scales is the Marcus Alcoholism Questionnaire (MAQ) (Marcus, 1963). The scale, which was developed using factor analysis, measures nine factors related to attitudes about alcoholism and alcoholics: (1) emotional difficulties (i.e., emotional difficulties or psychological problems are contributing factors to the development of alcoholism), (2) loss of control (i.e., alcoholics are unable to control their alcohol consumption), (3) prognosis for recovery (i.e., alcoholics do not and cannot be helped to recover from alcoholism), (4) steady drinking (i.e., periodic excessive drinkers can also be considered alcoholics), (5) character defect (i.e., the alcoholic is a weak-willed person), (6) social status (i.e., alcoholics come from lower socioeconomic strata of society), (7) illness conception (i.e., alcoholism is not an illness), (8) harmless indulgence (i.e., alcoholics are harmless heavy drinkers motivated by a fondness for alcohol), and (9) addiction liability (i.e., alcohol is a highly addictive substance). High scores on factors 1, 2, 4, and 9 reflect positive attitudes, while high scores on the other factors reflect negative attitudes.

The scale consists of 40 items on which participants rate their agreement from 1 (complete agreement) to 7 (complete disagreement); no items are reverse-scored. Each factor is composed of four items, and four additional items were added to the scale to make the total...
number of items an even 40, as well as to measure other questions of interest not covered by the
nine factors (Marcus, 1963). The scale was tested on several target populations during its
development, including healthcare professionals and experts in the addictions field. Based on
these tests, the scale scores are reported to have a reliability estimate of .90; however, it was not
specified whether this estimate was an average across the different target groups, or if the groups
were all treated as one (Addictions Research Foundation, as cited in Allen, 1993). The scale has
since been used, both in its original and in modified forms, to study many different target
populations, including nursing staff and students (Allen, 1993; Crothers & Dorrian, 2011; Estes
& Gurel, 1979; Ferneau, 1967; Ferneau & Morton, 1969; Gurel & Spain, 1977; Harlow & Goby,
1980; Martinez & Murphy-Parker, 2003), paraprofessional alcoholism counsellor trainees
(Ferneau & Paine, 1972), rehabilitation counsellors (Hart, 1975/76), physicians and medical
students (Geller et al., 1989), psychiatry residents (Patch & Ferneau, 1970), students enrolled in
a graduate-level substance abuse course (Van Kampen, 2010), undergraduate psychology
students (Mueller & Ferneau, 1971), methadone clinic staff (Soverow, Rosenberg, & Ferneau,
1972), various VA hospital staff (Lemos & Moran, 1978), and volunteer therapist aides (Leigh &
Gerrish, 1986).

There has been some limited reliability evidence reported by authors other than Marcus
(1963). Gurel (1978) found test-retest reliability for the scale to range from .89 to .96 for nursing
students; the test-retest interval was not reported. Crothers and Dorrian (2011) found Cronbach’s
alphas to range from .143 to .836 for the nine subscales in a study on nurses. The only subscales
that had alphas of .70 or greater were subscales 3, 5, and 6, with subscale 7 coming close with an
alpha of .684. In this study, the authors decided to use only the results from these four subscales,
due to the unreliability of scores from the other subscales.
This scale was also used in a modified form in several studies. One such modified form was created to adapt the scale to be used to assess attitudes toward drugs and drug addiction. This modified scale was used by Ferneau and Mueller (1973) and Soverow et al. (1972) and simply involved changing the words ‘alcohol’ and ‘alcoholics’ to ‘drugs’ and ‘drug addicts.’ Another modification involved the use of MAQ subscales 3, 5, 6, and 7 (with the deletion of one unspecified item from the original subscales), along with a fifth subscale made up of seven items from the Treatment Intervention subscale of the Substance Abuse Attitudes Survey (SAAS; Chappel, Veach, & Krug, 1985, see below); it was used in a study of medical students and staff. This modification resulted in Cronbach’s alpha values ranging from .54 to .76 for the four MAQ subscales (Geller et al., 1989).

Although the scale has been used in a small number of more recent studies, it is generally outdated, as it has not been modified to keep up with current knowledge about and attitudes toward alcohol use and misuse. The scale also has relatively poor reliability, has no reported validity evidence, and its items appear to tap more into beliefs than they do attitudes.

**Custodial Attitudes Inventory.** The Custodial Attitudes Inventory was developed by Mendelson et al. (1964) and is based on the Scale of Custodial Attitudes towards Mental Illness (CMI) by Gilbert and Levinson (1957). Item wording was changed, and some items were removed to adapt the scale to measure physicians’ custodial attitudes toward alcoholic patients. Custodial attitudes refer to traditional ‘caretaking’ attitudes toward alcoholic patients (similar to those attitudes traditionally held toward people with mental illness) and involve beliefs that alcoholics are irrational, dangerous, and incurable, and that they should be detained for the protection of community and staff. Custodial attitudes were seen to be the antithesis of humanistic attitudes, which emphasize the need for treatment over moral sanction.
The scale consists of 14 items that participants answer on a six-point scale ranging from +3 (agree very much) to -3 (disagree very much). Four points are added to individual item scores to make all scores positive, ranging from 1 (extreme humanism) to 7 (extreme custodialism). The sum of all scores becomes the participant’s CAI total score.

A factor analytic study to determine whether the scale is indeed unidimensional was not found in the literature. The scale has a Spearman-Brown corrected split-half reliability of 0.82 and showed convergent validity in that it correlated positively \( r = .30 \) with scores on an authoritarianism scale (Mendelson et al., 1964).

In a later study, the notion that custodial attitudes and humanistic attitudes are indeed on opposite ends of the spectrum was called into question. Berger-Gross and Lisman (1979) measured the attitudes of paraprofessional addictions employees toward alcoholism using the Attitudes Toward Alcoholism Instrument (ATAI) by Tolor and Tamerin (1975). Among other variables, this scale measured humanistic attitudes, and it was found that the group of paraprofessionals that was found to have more humanistic attitudes according to the ATAI, was also the group that had more custodial attitudes as measured by the CAI. The authors of this study concluded that the CAI may not, in fact, be measuring what it is purported to measure, and suggested that the scale should be studied further if it is to be effectively used in further research. Such a study did not occur, and this scale was no longer used in any of the studies in the literature following this criticism.

The CAI was designed to measure custodial attitudes held by physicians towards patients. Its scores appear to have acceptable reliability and the scale has been used with physicians, nurses, and paraprofessional alcoholism counsellors. Unfortunately, the scale is old and outdated,
a factor analytic study has never been done on the scale, and its validity has been severely questioned, thus making it inappropriate for further use in this field of research.

**Semantic Differential.** A popular type of scale for measuring attitudes used in studies from 1969 to 2001 was the semantic differential; studies used versions of this scale based on the work of Osgood, Suci, and Tannenbaum (1957), as well as Fisher, Mason, Keeley, and Fisher (1975). Most of these studies were done in the 1970s (seven out of 12), although the scale was used twice in the 1980s, once in 1992, and once in 2001. In this type of scale, participants are asked to report where their position lies on a scale between two bipolar adjectives in relation to a particular group (e.g., people who misuse alcohol, people with diabetes). For example, a participant would be asked to rate people with alcohol-use disorders somewhere on a scale between weak and strong, hopeless and hopeful, aimless and motivated, and so on.

The semantic differential has been criticized for having no theoretical underpinning for how the attitudes it measures might relate to behaviour, and as such, its use as a measure in clinical populations may be limited (Anderson & Clement, 1987). I was also unable to find any reliability or validity evidence for the use of the semantic differential in measuring attitudes towards individuals with SUDs. It is, therefore, not surprising that the use of such scales has fallen out of fashion in more recent years.

**Attitudes Toward Alcoholism Instrument (ATAI).** Tolor and Tamerin (1975) developed the Attitudes Toward Alcoholism Instrument (ATAI) out of a perceived need for a scale that was not developed with a special population in mind, and that would tap into attitudinal issues beyond those of special interest to previous scale authors. The scale was developed using a normative sample of 135 American students in education and other professional courses. The instrument is comprised of six scales: Psychological Etiology
(alcoholism is psychological in nature, i.e., based in learning and emotion), Physical-Genetic Etiology (alcoholism has a physical or genetic cause), Social Rejection (alcoholics should be socially rejected and avoided), Humanism (alcoholics should be treated in a kind, fair, and humanistic manner), Moral Weakness (alcoholics have weak morals or character), and Medical-Illness Model (alcoholics are sick and alcoholism should be treated as an illness). Each scale contains four items on which participants are asked to rate their agreement from 1 (strongly disagree) to 4 (strongly agree). The sum of the scores for the four items in each scale becomes the participant’s score for that scale, ranging from 4 to 16.

Test-retest reliability was found to be marginally acceptable in a group of 30 participants who completed the ATAI before and after a two-week interval; Pearson product-moment correlation coefficients in this study ranged from .53 to .77, with a median r of .71 (Tolor & Tamerin, 1975). There was no evidence of internal consistency provided for this measure. Given the weak test-retest reliability of the measure as well as the lack of any other evidence for internal consistency, this scale cannot be said to provide adequately reliable scores.

The scale was tested for content validity using a panel of judges who were asked to assign each questionnaire item to the dimension that they believed it addressed; agreement between judges was 89% (Tolor & Tamerin, 1975). As evidence for validity, the authors found that 41 hospitalized male alcoholics scored significantly higher on the Social Rejection, Moral Weakness, Physical-Genetic Etiology, and Medical-Illness Model scales than a group of non-alcoholic males. It was also found that there was a slight negative correlation between the amount of alcohol consumed by participants and scores on the Moral Weakness scale; the authors argue that this provides further validity evidence for the ATAI as it makes sense that drinkers would be less inclined to attribute moral weakness to other drinkers. The six scales are
relatively independent of one another, with small but significant positive correlations found between the Social Rejection and Moral Weakness scales, as well as between the Physical-Genetic and Medical Illness scales. In women, a weak negative correlation was found between the Social Rejection and Humanism scales. Social desirability, sex, educational level, and age were not significantly related to scores on the six scales of the ATAI (Tolor & Tamerin, 1975).

The authors conducted a principal component analysis using orthogonal rotation and found six principal components (Tolor & Tamerin, 1975). Three factors (Moral Weakness, Physical Base, and Social Ineptness) matched, for the most part, what they had derived on a conceptual basis. The other three factors were unexpected: Positive Identification (alcoholics are very much like other people and are deserving of respect and acceptance), Benevolent but Deviant Notion (alcoholics are distinctly different than other people but do not pose a danger) and Blame Denial (alcoholism is a product of unfortunate life circumstances and alcoholics are not responsible for their addiction). The authors do not reconcile the differences between their conceptual derivation of the factors and the factors found in their factor analysis; they merely argue that these statistically derived factors increase the usefulness of the measure by bringing several new attitudinal dimensions to light. The authors did not use the results from the principal component analysis to inform the scoring of their scale; instead, they decided to continue scoring the scale based on their original conceptually derived factors. This is a major weakness in the ATAI’s development.

The ATAI has also been used with paraprofessional alcoholism counsellors (Berger-Gross & Lisman, 1979), medical, nursing and pharmacy students in Australia (Engs, 1982), students in education, medicine, pharmacy, and nursing in Italy (Poldrugo, Modonutti, & Buttolo, 1986), and nurses in the U.S. (Sullivan & Hale, 1987). The ATAI has not been used in
any recent studies, however. Likely, this is because it was constructed at a time when our scientific and sociocultural understanding of alcohol-use disorder was not nearly as advanced as it is today and thus the ATAI is outdated. The measure lacks sufficient evidence for internal consistency and thus cannot be said to produce reliable scores. As well, the validity of inferences made from the measure is seriously questionable, given that the authors do not reconcile the differences between their conceptual derivation of the scale and the results of their factor analysis and do not use the results of their principal component analysis to inform the scoring of the scale.

Alcohol and Alcohol Problems Perception Questionnaire (AAPPQ). The AAPPQ (Cartwright, 1980) was designed to reflect a model of therapeutic attitudes (TA) created during the Maudsley Alcohol Pilot Project (Shaw, Cartwright, Spratley, & Harwin, 1978; see Figure 2.1). The model sets out to explain the relationship between therapeutic commitment (TC), role security (RS), and a set of factors composed of self-esteem (SE), training, experience, and role support. These four factors are referred to as basic role requirements and are hypothesized to lead to the development of RS which, in turn, is hypothesized to lead to increased TC. TC refers to the degree of willingness or motivation held by a professional in relation to providing therapy or treatment to a particular patient group, as well as to how rewarding they find this work, both personally and professionally. RS refers to the degree to which the professional believes that they possess the appropriate skills and knowledge to work with the patient group as well as to how appropriate they believe their involvement is in such work.

The questionnaire was created using data from previous interview-based (Cartwright, Shaw, & Spratley, 1975) and questionnaire-based (Cartwright, 1979) research conducted with community agents who worked with alcoholic clients. The Cartwright (1980) version of the scale
contains 35-items and seven subscales organized into three main components: (1) Therapeutic Attitudes (TA; comprised of five subscales), (2) Role Support, and (3) General SE. The TA subscales are further broken down into TC and RS subscales. TC is composed of three subscales: Willingness (motivation or willingness to work with drinkers, 5 items), Satisfaction (expectations of satisfaction working with drinkers, 5 items), and Task-Specific SE (SE related to working with drinkers, 6 items; also referred to as Role-related SE). RS is measured by two subscales: Role Adequacy (feelings about adequacy of knowledge and skills for working with drinkers, 6 items) and Role Legitimacy (perceived extent to which the subject feels they have the right to work with drinkers, 4 items). The second section is composed of statements relating to Role Support (3 items) and the third section measures General SE (6 items) (Cartwright, 1980).

Figure 2.1

_Basic Role Requirements and the components of Therapeutic Attitude._ Adapted from Shaw et al. (1978).
It should be noted that, in the main text of Cartwright (1980), it is stated that there are seven general SE items in the scale, while only six items are listed in the appendix. The general SE items are taken from the work of Rosenberg (1965). Participants are instructed to rate their agreement with items on a scale from 1 (strongly agree) to 7 (strongly disagree). A final score for each of the seven subscales is calculated by adding together the scores from individual subscale items. Negatively worded items are reverse scored. TC is calculated by adding together total scores from the Willingness, Satisfaction, and Task-specific SE subscales and RS is calculated by adding together scores from the Role Adequacy and Role Legitimacy subscales. Overall TA (OTA) is calculated by adding together total TC and RS scores and converting to standard scores based upon the total sample mean and standard deviation presented in Cartwright (1980). Role Support and General SE remain as separate factors.

The original AAPPQ study (Cartwright, 1980) included 109 helping agents who took a basic summer school course on alcoholism, 49 who attended a one-week residential course on alcoholism counselling, and 29 who attended a one-week course on research methods as applied to alcoholism services (total N = 187). Participants were mainly directors and volunteers from local councils on alcoholism (29%), social workers (25%), nurses (14%), and physicians (7%). Almost half of participants were from senior grades in their professions. Participants completed the AAPPQ three times: once before taking the course, once on the final evening of the course, and once at a six-month follow-up. One hundred and fifteen subjects returned all three surveys. All subscales scores were reported as reliable; both pre and post-course Cronbach’s alphas ranged from .70 to .90 for each of the seven subscales. Lightfoot and Orford (1986) also found the AAPPQ to produce reliable scores in a group of 24 community psychiatric nurses and 24 social workers; Cronbach’s alpha in this study ranged from .75 to .95, with a reported total score
alpha for the five TA subscales of .83. However, it should be noted that, in this study, the
AAPPQ is said to be comprised of 41 items instead of the original 35; because the authors do not
provide a full version of the measure they used, it is not possible to see exactly how their scale
differed from the scale presented in the appendix of Cartwright (1980). Ford, Bammer, and
Becker (2008) provided reliability evidence for a 27-item version of the AAPPQ, which included
only the five TA subscales (with seven items instead of six in the Role Adequacy subscale).
Cronbach’s alphas in this study ranged from .68 to .94, with an OTA alpha of .93. Hughes et al.
(2008) used the AAPPQ (without the general SE scale) with 79 community mental health case
managers and reported Cronbach’s alpha estimates of .70 to .90 for the six subscales and an
alpha of .90 for all the items in the entire scale. They did not provide a rationale for using a
composite measure for all six subscales.

Whether or not to convert the five TA subscales into a measure of OTA is a matter of
contention in the literature. Given the high correlations found among the five TA factors and the
fact that the most important basic role requirements were all found to have significant
relationships with all five TA subscales, the use of a composite TA measure seems to make sense
(Gorman & Cartwright, 1991), although a measure is either unidimensional or multidimensional.
Factor analysis conducted with the AAPPQ does provide some evidence for the use of OTA
scores. For example, Cartwright (1980) writes that “[a] principle components analysis conducted
on the five [TA] scales indicated that more than 60 per cent of the variance was explained by the
first and only significant component, and that each variable had a similar weighting in the range
of 0.8” (p. 415). However, Gorman and Cartwright (1991) question the appropriateness of using
OTA as an outcome measure for studies which involve measuring attitude change, such as those
attempting to measure the effectiveness of educational interventions. They claim that the factor
structure of TA is altered in this context and that there are two systems underlying the data when measuring change: a basic role requirements and RS system and a TC system, the latter of which is more resistant to change than the former. The researchers caution that changes in OTA may be interpreted too optimistically, as these changes disproportionately represent changes seen in RS, rather than TC. For example, an intervention (such as a course) can contribute to a change in basic role requirements which, in turn, contributes to increased RS, but not necessarily TC. The TC scales are also the scales that are more likely to be reflective of behaviour, and so are essentially more important to look at when evaluating the effectiveness of an intervention. As such, Gorman and Cartwright (1991) recommend that the five TA subscales be examined separately when measuring attitude change.

Anderson and Clement (1987) devised a shortened, 10-item version of the AAPPQ, calling it the Shortened AAPPQ (SAAPPQ). In this study, a 30-item version of the AAPPQ was completed by 312 general practitioners (GPs). This version of the scale included a seventh item in the Role Adequacy subscale (“I feel I know enough about the psychological effects of alcohol to carry out my role when working with drinkers”) and did not include the General SE subscale. The authors used a factor analytic data-reduction technique with their data and chose the two items from each TA subscale with the highest factor loadings to form their new shortened scale, thus ending up with 10 items overall. They decided not to include Role Support items in their scale. The correlation between composite scores on the new and old scales, minus the Role Support subscale, was .78. The scale has since been used with nurses (Crothers & Dorrian, 2011) and GPs (Anderson et al., 2003; Jacka, Clode, Patterson, & Wyman, 1999).

Gorman and Cartwright (1991) responded to the creation of the SAAPPQ and questioned its validity. They claimed that, just like the composite measure OTA, the SAAPPQ ends up
disproportionately reflecting the subscales that tap into attitudes related to RS, rather than TC (the former being less resistant to change), and thus its usefulness as a measure of attitude change is limited.

Terhorst et al. (2013) performed exploratory (EFA) and confirmatory (CFA) factor analyses with the 30-item version of the AAPPQ (Anderson & Clement, 1987) using data from 299 nursing students. Although Anderson and Clement (1987) report using a scale ranging from 1 (strongly agree) to 7 (strongly disagree), Terhorst et al. (2013) report using a five-point scale of Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree and do not point out this discrepancy. The researchers randomly split their sample into two data sets and performed EFA on data from 149 participants using principal axis factoring and oblique rotation to examine its factor structure; they found seven factors which explained 66.9% of the total variance. A parallel analysis also provided evidence to support a seven-factor solution. The first factor was Role Legitimacy; the factor included three of the original Role Legitimacy items, while the fourth original Role Legitimacy item (“I feel I have a clear idea of my responsibilities in helping drinkers”) loaded with the original items from the Role Adequacy scale to form the second factor. The third factor was Role Support and was made up of its three original items. The fourth factor included two items from the original Motivation scale (“I am interested in the nature of alcohol-related problems and the responses that can be made to them” and “I want to work with drinkers”) and two items from the original Work Satisfaction scale (“In general, I feel I can understand drinkers” and “I like drinkers”) and retained the name Motivation. The fifth factor was made up of the three negatively worded items from the original Motivation scale; this factor was named ‘Lack of Confidence.’ The authors hypothesized that this factor may have emerged as a result of the nursing students responding to scale items in a different way than would
professionals, given the former’s lack of opportunities to gain experience or receive support in working with drinkers. The sixth factor was Task-Specific Self-Esteem and was made up of all of its six original items as well as one of the original Work Satisfaction items (“I often feel uncomfortable when working with drinkers”). The seventh factor was Work Satisfaction and included the items: “In general, one can get satisfaction from working with drinkers” and “In general, it is rewarding to work with drinkers.” Three items did not have loadings at the .40 value (items 19, 20, and 25); they were flagged for further analysis.

The authors performed CFA with the data from the remaining 150 nursing students, comparing six different factor structures. They found that the seven-factor structure without items 19, 20, and 25 was the model of best fit for the data; Cronbach’s alphas for the seven proposed subscales ranged from .705 to .903. Role Adequacy was significantly correlated with all other subscales but was most strongly correlated with Role Legitimacy. The Motivation, Lack of Confidence, Task-Specific Self-Esteem, and Work Satisfaction subscales correlated strongly with each other, but relatively weakly with the Role Adequacy and Role Legitimacy subscales. This finding provides support for the argument put forth by Gorman and Cartwright (1991) that there are, in fact, two subsystems underlying the five TA subscales: TC and RS.

The seven-factor solution put forth by Terhorst et al. (2013) raises some interesting questions about the AAPPQ and its underlying factor structure. One cannot say whether a seventh factor emerged solely because of the use of inexperienced nursing students as subjects, or if this factor would have emerged with professionals as well. Anderson and Clement (1987), in their study with GPs, also extracted a seven-factor solution for the AAPPQ using principal axis factoring with oblique rotation, suggesting that a seven-factor solution may be more appropriate than a six-factor solution for use with professionals as well as nursing students.
However, the researchers did not attempt to confirm the appropriateness of this solution for their data, nor did they attempt to compare the seven-factor solution to the six-factor solution, so one cannot draw any firm conclusions about the factor structure of the AAPPQ from this study. This remains a direction for future research. Given the lack of any substantial evidence for the appropriateness of using a seven-factor solution for the AAPPQ with professionals and the fact that their study did not include any professionals, Terhorst et al. (2013) concluded that they could only recommend their seven-factor solution for use with baccalaureate nursing students. They also reported another limitation in their study: they only used data collected from the participants before an alcoholism training program, and thus they were unable to see if their seven-factor solution would hold up after the previously untrained nurses received training. It should also be noted that the Lack of Confidence and Work Satisfaction subscales from the Terhorst et al. (2013) scale contain only 2 items each, thus calling into question the viability of these factors.

There appears to be an inconsistency in the literature regarding the Role Adequacy item “I feel I know enough about the psychological causes of drinking problems to carry out my role when working with drinkers”; it is present in Anderson and Clement (1987) and Ford et al. (2008), but is not included in the appendix of Cartwright (1980), where the scale was originally published. After thoroughly searching the literature, I am unable to find when exactly this item was added to the scale, or for what reason. As the earliest publication with this item I could find was Anderson and Clement (1987), I have chosen to refer to the version of the AAPPQ where this item is present as the 30-item Anderson and Clement (1987) AAPPQ.

**Drug and Drug Problems Perception Questionnaire (DDPPQ).** Several studies modified various versions of the AAPPQ to apply to drugs instead of alcohol. Although not all
the resultant scales were named the DDPPQ, all AAPPQ versions which were modified to refer to drugs will be presented in this section.

Hughes et al. (2008) modified the original Cartwright (1980) AAPPQ so it would apply to drug use; they simply replaced the word ‘drinkers’ with ‘drug users’ and the word ‘alcohol’ with ‘drugs,’ throughout the entire scale. They did not rename the scale. Ford et al. (2008) created a modified version of the 30-item AAPPQ (Anderson & Clement, 1987) for use in a study with nurses. They changed the wording of the measure, so it would apply to illicit drugs as opposed to alcohol and renamed the scale the “Therapeutic Attitude Scale.” Cronbach’s alphas for this modified scale ranged from .68 to .94 for the five TA subscales, with an OTA alpha of .93.

Jacka et al. (1999) modified the SAAPPQ to tap into attitudes about drug use, calling this scale the DDPPQ. They used their shortened version of the DDPPQ alongside the SAAPPQ to measure the attitudes of GPs.

Albery et al. (2003) made the same changes to the AAPPQ (Cartwright, 1980) as Hughes et al. (2008) for a study with drug workers and called this new scale the DDPPQ. Their 41-item version of the DDPPQ consisted of one question about experience, one question about previous drug education, the original five TA subscales (26 items), the original Role Support subscale (3 items), and Rosenberg’s full 10-item General SE scale. Alpha reliability estimates for the subscale scores in this version of the DDPPQ ranged from .71 to .92. Although Albery et al. (2003) reported acceptable reliabilities for their version of the DDPPQ, their study was criticized for not commenting on any of the other psychometric properties of the scale (Watson, Maclaren, & Kerr, 2006).
Watson et al. (2006) used the 30-item AAPPQ (Anderson & Clement, 1987) to create a shortened, 20-item version of the DDPPQ, which they claim has good reliability and validity. In addition to changing the wording to apply to drugs instead of alcohol, they also changed an item which asked about alcohol dependence syndrome to an item that asked about the physical effects of drugs, as not all drugs cause a dependence syndrome. To support the content validity of the 30-item DDPPQ, the researchers asked the participants what they thought about the scale, by means of a survey. They found that 81% of respondents thought that the scale was relevant to their work (the remaining respondents reported rarely working with drug users), and that 67% of respondents thought that no other items were necessary to accurately measure their attitudes.

The researchers performed a principal component analysis (PCA) on the 30-item version of the DDPPQ using data from 377 medical staff, clinical psychologists, occupational therapists, and nurses (Watson et al., 2006). Items with loadings <.55 were discarded, as were items with poor test-retest reliability. After discarding 10 items, a 20-item scale was left, which had five factors: Role Adequacy (7 items, alpha = .94), Role Support (3 items, alpha = .78), Job Satisfaction (4 items, alpha = .80), Role-related Self-esteem (4 items, alpha = .69), and Role Legitimacy (2 items, alpha = .89). Not surprisingly, many of the items that had been identified in the survey as detracting from the content validity of the measure also ended up being identified by the statistical analyses as appropriate items for deletion. Unfortunately, the authors did not survey participants about the 20-item version of the DDPPQ that they created, thus making it unclear if construct under-representation resulted from reducing the scale to 20 items. As well, the fact that the Role Legitimacy subscale contains only two items calls into question the viability of this factor; this is something that should be addressed in future research with this scale.
The Watson et al. (2006) version of the DDPPQ has been used in recent studies with counsellors (Rodgers-Bonaccorsy, 2010), employees at inpatient mental health treatment centres – including physicians, nurses, occupational therapists, managers, and support staff (Howard & Holmshaw, 2010), as well as with hospital staff – including nurses and support staff (Nilsen, Stone, & Burleson, 2013).

There appears to be some contradictory information in the literature surrounding one of the Watson et al. (2006) DDPPQ items. For instance, in the AAPPQ paper by Cartwright (1980), as well as the paper by Anderson and Clement (1987), one of the items in the Task-specific SE scale is “I wish I could have more respect for the way I work with drinkers.” Along the same lines, in the DDPPQ paper by Albery et al. (2003) this item is “I wish I could have more respect for the way I work with problem drug users.” However, the Watson et al. (2006) paper replaces this item with “In general, I have less respect for drug users than for most other patients/clients I work with.” There is no explanation for why this was done, and I am unable to find any other papers which contain the item as it is worded in Watson et al. (2006). This difference in wording changes the focus of respect from the respondent to the client and does not appear to make sense in the context of a self-esteem scale.

The AAPPQ/DDPPQ are two of the more promising scales in the literature. Although the original scale was developed over 40 years ago, the theory upon which it is based, as well its individual scale items, are still relevant today; its relevance is reflected in the fact that it is one of the more commonly used scales in the recent literature. Out of all the versions described above, the Watson et al. (2006) version shows some of the best psychometric evidence in terms of reliability and validity, while at the same time offering an advantage in terms of its shortened length. Although there have been many attempts to construct a measure of therapeutic attitudes
for use with professionals who work with drug-misusing clients, Watson et al. (2006) note that their paper “is the first to provide full details of the development and psychometric testing of such an instrument” (p. 214). Although Terhorst et al. (2013) also provide in-depth details about the development and testing of their version of the AAPPQ, the generalizability of their study is questionable given their use of exclusively inexperienced nursing students as their subjects. The Watson et al. (2006) measure, however, does not have this problem; it was developed using a wide array of professionals and has been used in recent studies with counsellors, as well as with a wide variety of health-related occupations.

However, there remains one major problem with the AAPPQ/DDPPQ. As it was designed to test a model, it includes many items that do not directly measure attitudes, as defined by the multicomponent model (cognition, affect, and behaviour). For example, the Role Security, Role Support, and Self-esteem items do appear to measure attitudes towards the participant’s role in the treatment of addiction in general, but do not appear to measure participants’ attitudes towards the clients or patients themselves, on either a general or personal level. As the objective of the current study was to measure attitudes toward clients, the use of the AAPPQ/DDPPQ as a measure of attitudes was questionable. However, many of these items were useful for the purposes of the current research, as they tap into some of the factors that have been suggested to affect attitudes. It should also be noted that, although many of the Motivation and Work Satisfaction items appear to tap into attitudes toward substance addicted clients themselves, these items represent a minority of the total items in the scale, and thus call into question the appropriateness of the scale’s use as a primary measure of attitudes.

Substance Abuse Attitudes Survey (SAAS). Another commonly used measure of attitudes is the SAAS, a 50-item instrument created from an original measure of 153 items
presented using a Likert-type response format ranging from 1 (strongly disagree) to 5 (strongly agree) and written to tap into attitudes toward various aspects of drug and alcohol misuse (Chappel et al., 1985). The 153-item measure was administered to 26 teachers who taught courses on alcohol and drug misuse; using this data, the researchers performed a principal axis extraction of factors with orthogonal rotation, extracting 10 factors. They found that “five of the 10 rotated factors appeared to be coherent” (p. 49). After deleting items that they deemed poorly worded and ineffectual, 106 items were left for the next analysis. They administered these items to a group of 42 teachers (including the original 26) and performed a similar factor analysis with orthogonal rotation. Items with factor loadings of at least .40 were retained, resulting in a 75-item measure. This 75-item measure was administered to 50 clinicians from diverse backgrounds who were involved in the professional management of substance-misusing patients. The resulting data were factor analyzed to yield five meaningful clusters of items; items with factors loadings of over .40 were retained, this time resulting in a 50-item attitude scale. It should be noted that, given the extremely low participant to item ratios in these factor analyses, it is quite likely that their resultant factor structures are erroneous. For example, in a study on factor analysis, Costello and Osborne (2005) found that only 10% of the studies in their sample that used a participant to item ratio of 2:1 produced correct factor structures. This 2:1 ratio is significantly higher than the ratios used in the Chappel et al. (1985) factor analyses described above, suggesting that the factor structures produced by these analyses have significantly less than a 10% chance of being accurate.

The 50-item measure produced from the factor analyses described above was then administered to 151 clinicians from across the U.S. (Chappel et al., 1985). The next factor analysis was conducted using data from a subsample of these 151 clinicians who were designated
as ‘noncriterion’ clinicians (i.e., they did not specialize in substance misuse treatment); the number of subjects in this sample was not reported. This factor analysis resulted in the extraction and rotation of five stable and coherent factors. The ‘criterion’ clinicians, whose data were not included in the factor analysis, “met the following criteria: (1) having at least [six years] or more experience in treating patients who misuse alcohol and other drugs; (2) having a patient load of which at least 10% consisted of these patients; (3) experiencing professional satisfaction in treating these patients, as indicated by self-report measures; and (4) reporting some success in treating these patients, as indicated by self-report measures” (p. 49). The criterion clinicians were found to score significantly higher on two of the extracted scale factors: Treatment Optimism and Treatment Intervention, thus providing some validity evidence for the scale. The 50-item measure was then administered to 324 non-criterion clinicians and 116 criterion clinicians including GPs, internal medicine specialists, psychiatrists, counsellors, medical students, psychologists, social workers, and nurses; a fifth and final factor analysis was conducted using the data from the non-criterion clinician group. Five stable and coherent factors were again found to emerge.

As the Chappel et al. (1985) study does not provide definitions for each factor, I will use the definitions provided in Balich et al. (2015) to describe each factor: (1) Permissiveness (P; a tolerant and accepting attitude toward substance use; 10 items); (2) Nonstereotypes (NS; non-reliance on popular societal stereotypes of substance use and substance users; 10 items); (3) Treatment Intervention (TI; orientation toward perceiving substance use/misuse in the context of treatment and intervention; 8 items); (4) Treatment Optimism (TO; an optimistic perception of early intervention and treatment, relapse, and outcome; 5 items); and (5) Non-moralism (NM; absence/avoidance of moralistic perspective when considering substance use and substance
users, addressing such issues as law, will power, religion, and punitive approaches; 9 items). The remaining eight items did not load onto any of the factors and the reason for their inclusion in the scale is not provided by Chappel et al. (1985). To score the SAAS, a raw score is calculated by adding up individual item scores for each factor; this raw score is then transformed using a conversion table provided by the scale authors. A score of 50 or above is considered optimum, as it reflects the mean score from the criterion clinician group described above. Ten points in either direction represents one standard deviation.

The criterion clinicians were again found to have statistically significantly higher TI and TO subscale scores (p=<.001) than the non-criterion clinicians (Chappel et al., 1985). Cronbach’s alpha value estimates for the subscales were found to range from .63 to .81 for the non-criterion group and from .56 to .76 for the criterion group. Three out of the five subscales had reliability estimates that were below .67 for both criterion and non-criterion groups; the TI scale had the lowest reliability estimates, followed by the NM scale, and then the TO scale. Only the P and NS subscales were found to have acceptable reliability estimates.

The SAAS has been used in numerous studies with many professional groups, including nurses (Cannon & Brown, 1988; Ducote, 1992; Foster & Onyeukwu, 2003; Gerace, Hughes, & Spunt, 1995; Happel, Carta, & Pinikahana, 2002; Kelleher & Cotter, 2009), medical students, residents, and physicians (Bland et al., 2001; D’Onofrio et al., 2002; Geller et al., 1989; Kelleher & Cotter, 2009; May, Warltier, & Pagel, 2002), counsellors and counselling students (Balich et al., 2015; Chasek, Jorgenson, & Maxson, 2012; Dunston-Mclee, 2001; Macleod, 2015; Muldoon, 1998), various mental health professionals (Pinikahana, Happell, & Carta, 2002; Richmond & Foster, 2003), and social workers (Stein, 2003).
Regarding modifications of the instrument, a 25-item form of the SAAS, called the Brief Substance Abuse Attitudes Survey (BSAAS), was developed by two of the original authors (Veach & Chappel, 1990). Very few studies have used this form of the instrument and limited psychometric evidence is available to support its use. D’Onofrio et al. (2002) report using the BSAAS with a group of emergency medicine residents, but they do not cite the Veach and Chappel (1990) paper in their study; the only SAAS-related citation in their study is the Chappel et al. paper from 1985. The BSAAS was also used by Zimberg, Struening, Solomon, and Sholler (1991) in the development of another scale called the Dual Diagnosis Attitudes Survey (DDAS) (as cited in Dunston-Mclee, 2001). This scale used the 25 items of the BSAAS and added another 25 items that were specific to treating patients with dual diagnoses. O’Neill (1997) carried out a factor analysis on the DDAS with a group of addiction specialists, social workers, psychologists, and psychiatrists, and found four factors, only three of which had acceptable Cronbach’s alphas: treatment pessimim (alpha = .84), positive attitude toward integrated treatment (alpha = .80), positive attitude toward separate treatment (alpha = .82), and vigilance in recovery (alpha = .57) (as cited in Dunston-Mclee, 2001). The DDAS was used once with a population of rehabilitation counsellors (Dunston-Mclee, 2001), but no other studies using this scale were found.

Jenkins, Fisher, and Applegate (1990) also modified the SAAS. They administered the original SAAS to 598 undergraduate students and performed a factor analysis using orthogonal rotation, ending up with a 39-item scale with a three-factor structure. The three factors in this modified scale were: (1) Stereotypes and Moralism (17 items; α = .78); (2) Treatment (11 items; α = .75); and (3) Permissiveness (10 items; α = .74). A subsample of 103 students was used to assess test-retest reliability over a six-week interval; reliability coefficients of .86, .65, and .82
were found for factors 1, 2, and 3, respectively. Overall, the Jenkins et al. (1990) SAAS seems to produce more reliable scores than the original Chappel et al. (1985) measure. However, the measure lacks any other psychometric evidence, such as validity evidence, to support its use. As well, the substantial differences in clinical experience between the undergraduates from Jenkins et al. (1990) and the clinicians from Chappel et al. (1985) make it difficult to directly compare the results from these two studies. Perhaps a three-factor structure is more appropriate than a five-factor structure for use with a clinically inexperienced population, but not with a clinically experienced population; further research is necessary to answer this question. The Jenkins et al. (1990) version of the SAAS is not commonly used, although Beckstead (2002; 2003) used the scale with nurses and found similar alpha reliability estimates for the three subscales (they ranged from .71 to .76 in the 2002 study and .66 to .78 in the 2003 study).

Despite the use of the SAAS in current studies, its validity has been questioned by several authors (Richmond & Foster, 2003; Rodgers, 2010; Stein, 1999; Watson, et al., 2006), given the substantial societal changes toward drug use that have occurred since it was developed over 30 years ago. For example, Richmond and Foster (2003) argue that the validity of the TI factor is declining as its items are representative of the 1980s American drug treatment philosophy of disease and abstinence, as opposed to being reflective of more modern concepts such as harm reduction and holistic treatment approaches. In addition to the measure’s questionable validity, its reliability has also shown to be questionable at best; three out of the five SAAS subscales have Cronbach’s reliability estimates of below .67. The lack of good psychometric evidence for the SAAS makes it difficult to justify its use in future studies.

**Medical Condition Regard Scale (MCRS).** The MCRS (Christison, Haviland, & Riggs, 2002) was developed with the intention of creating a scale that could measure the biases,
emotions, and expectations invoked in a physician when presented with the description of a specific medical condition. To create the pilot version of the MCRS, the authors made a list of items that reflected the literature on how physicians react to patients whom they like and whom they dislike. They also created items based on the literature describing physicians’ negative responses to patients with stigmatized conditions. After generating this list, the authors discussed these potential items with several primary care faculty members at their institution to ensure that the items were relevant to their day-to-day clinical experience. They then incorporated the advice of their colleagues by removing items that were redundant, ambiguous, or not applicable across a diverse array of conditions. They were left with a pilot version of the MCRS that consisted of 18 items, nine positively worded and nine negatively worded. A six-point Likert-type response scale was used (1 = strongly disagree, 2 = disagree, 3 = not sure but probably disagree, 4 = not sure but probably agree, 5 = agree, and 6 = strongly agree).

The authors conducted four sets of analyses to examine reliability and validity. They performed exploratory factor analysis using the data from 440 medical students who completed the pilot MCRS in relation to one of 12 diverse conditions. An 11-item unidimensional scale with an alpha coefficient of .87 emerged as the best solution for this factor analysis. Confirmatory factor analysis was then performed using the data from 163 medical students who rated two psychiatric conditions, depression and alcohol dependence. For both models, all path coefficients were significant; both models resulted in excellent fits to the data. The confirmatory factor analysis thus supported the 11-item unidimensional measure. Test-retest reliability was analyzed with 93 second-year students; they rated the severe emphysema from smoking condition twice over a 17-day interval, resulting in a test-retest reliability coefficient of .84 (Christison et al., 2002).
To test for construct validity, the authors compared the mean MCRS scores of the original 440 students for each condition and found the expected results: straightforward medical conditions (e.g., heartburn) received the highest regard ratings overall, and somatoform conditions (e.g., long-standing abdominal complaints with no abnormalities found on repeated evaluations) received the lowest regard. A second test for validity used students’ MCRS scores for major depression and alcohol dependence before and after a psychiatry clerkship. Both groups of students significantly improved their regard for patients with major depression after the clerkship, while students who spent three weeks of their rotation on an alcoholism treatment unit improved their regard for patients with alcohol dependence significantly more than the students who did not spend time on this unit (Christison et al., 2002).

The MCRS has since been used in a number of studies with various addiction and psychiatric professionals, including psychiatry residents (Christison & Haviland, 2003) and physicians, psychiatrists, psychologists, nurses, and social workers (Gilchrist et al., 2011; van Boekel, Brouwers, van Weeghel, & Garretsen, 2014). Although the scale has not been used with counsellors, its use with psychologists, social workers, and other addiction professionals suggests that such use would be appropriate. The scale also offers other advantages, such as being contemporary, relatively brief in length, and having good validity and reliability evidence. Given these advantages, the use of the MCRS in the current study was deemed appropriate.

**Summary.** This section makes it clear that measuring attitudes is not a simple task. A thorough search of the literature yielded no measures that were completely ideal for the purposes of the current study. The MCRS was chosen as the most appropriate measure for use given its brevity, simplicity, acceptable reliability, and acceptable construct and face validity. The one downside to using this scale is that some items had to be modified for use with counsellors. The
AAPPQ/DDPPQ are not ideal measures of attitudes, but they did provide useful items to measure some factors that have been shown to affect attitudes, namely in their Role Adequacy and Role Support subscales.

Now that I have described the most commonly used measures of attitudes used in the literature, the next section will provide a historical overview of research conducted on health professionals’ attitudes toward substance use and substance users.

**Historical Trends**

This section reflects my observations and summaries of research on attitudes of health professionals toward patients or clients with substance use issues after reviewing the literature decade by decade. The 1960s saw the beginning of research on this topic. Most of the studies in this decade focused on nurses, but there were also studies that included physicians, psychologists, welfare workers, non-professional hospital employees, social workers, and volunteer therapists. Attitudes were found to be mostly negative among all groups studied; stigma and stereotypes were prevalent and nurses in one study even reported that their patients’ alcoholism diagnoses would often be withheld by attending physicians. Nurses in these early studies often reported feeling responsible for more than they felt capable of in their work with substance users, and as such, feelings of discouragement and frustration were commonly found. Contact with substance-using patients was often associated with negative attitudes in nurses, but positive attitudes in other professions, such as physicians. Participants’ attitudes toward treatment prognosis were often found to be pessimistic, and this pessimism was often associated with moralistic attitudes. Not surprisingly, older participants were generally found to have more negative and moralistic attitudes during this time. I was able to find 16 studies conducted during the 1960s that looked at attitudes toward alcoholics, but only one study that focused on attitudes
toward illicit drug users. Three studies were conducted that measured the effect of an educational intervention on attitudes; only one of these studies found a positive effect and this study used experiential learning in their intervention. A significant emphasis was placed on etiological beliefs during this decade, and most studies were conducted under the assumption that the disease model and the moral model of addiction represented diametrically opposing positive and negative beliefs, respectively.

The 1970s were also dominated by studies that used nurses as participants and focused on attitudes toward alcoholics. The MAQ was the most commonly used measure during this decade, but the semantic differential was used almost as often. Most studies of psychologists found little belief in the disease model of addiction and little recognition of alcohol as a highly addictive substance, while studies of physicians found greater agreement with the disease model. It became clear during this time that belief in the disease model did not preclude the presence of moralistic attitudes and that other models of addiction also allowed for positive attitudes. For example, the psychological etiology of alcoholism became more widely recognized by studies conducted in this decade. A number of studies found that clinicians were reluctant but willing to work with alcoholic patients; many clinicians believed that alcoholics suffered from a disease and were worthy of treatment, but also that they were personally responsible for their situation. Along the same lines, the belief that alcohol is not a highly addictive substance and that alcoholics have control over their drinking was also common. Nurses were frequently found to have more negative attitudes than other professional groups in most comparative studies conducted during this time, and older participants were again found to be more moralistic in their views. Three studies that looked at the effect of training interventions on attitudes were conducted during this decade; two of these studies found significant improvements in attitudes.
The first studies that looked at addiction treatment centre staff were conducted during this time; these staff were usually found to have more positive attitudes than regular hospital staff. Attitudes did not appear to improve significantly during the 1970s, but some studies did find positive and somewhat glorified attitudes toward marijuana users.

The 1980s saw a major increase in the amount of studies that focused on attitudes toward substance use in general, as opposed to previous studies, which focused primarily on alcoholism. The most commonly used measures during this time period were measures created by study authors for use in their specific studies, followed by the MAQ, ATAI, and SAAS. The use of the SAAS led to increased recognition of the distinction between affective and cognitive aspects of attitudes; studies found that cognition was more easily changed through educational interventions than was affect. Nurses remained the most commonly studied group, but comparative studies on various student groups also became popular during this time. Students were generally found to have more positive attitudes than their graduated professional counterparts. Attitudes remained fairly negative throughout this decade, although several studies looked at the effect of educational interventions on attitudes and found promising results. Factors that determine the success of educational interventions were explored for the first time in these studies. Knowledge was a commonly investigated factor during this time, despite most studies finding no direct correlation with attitudes. A lack of knowledge remained a common theme during the 1980s across all participant groups. The disease model reached a height of popularity during this time, despite increased support for the psychological model and increased recognition of the role of external factors in the development of addiction. It is also worth noting that, up until the end of the 1970s, only a handful of studies on attitudes toward substance use were
conducted outside of the U.S.A.; the 1980s saw a major increase in studies conducted in other nations.

In the 1990s, there was close to an even split of studies that focused on either alcoholism, drug addiction, or substance use in general. Author-written measures still dominated the literature, with the AAPPQ and SAAS being the most commonly used non-author-written measures. Nurses, GPs, addiction professionals, psychiatrists, and counsellors were the most commonly studied professional groups during this time, and factors that affect attitudes became more frequently investigated during this decade. Specialization emerged as an important factor for the first time in the early 1990s and the view among primary clinicians that substance users should be seen exclusively by specialists was very common. Attitudes began to become more positive during this time and willingness to work with substance users increased significantly throughout the decade; however, this willingness was often attributed to societal need rather than personal interest, stigma was still prevalent, and clinicians continued to report a preference for working with other patient groups. A lack of sufficient knowledge and training for working with substance users remained a common theme in most studies. Personal substance use habits and personal experience with addicted individuals were looked at with increasing frequency during the 1990s and most studies found these factors to be positively related to attitudes. Studies began to recognize new models of addiction, such as the psychosocial model, and the dichotomy between the moral and disease models became an idea of the past. The psychosocial model likely became the most widely taught conception of addiction during the 1990s, as participants with more substance use education tended to endorse belief in this model. However, psychologists and counsellors during this time often endorsed belief in the disease model of addiction, despite their historical rejection of this belief. The first study that used an educational intervention with
counsellors took place in this decade; the intervention was able to reduce the participants’
stereotypical beliefs, as measured by the SAAS.

The shift away from studies about alcoholism to studies about substance use in general
became even more prominent during the 2000s. Nurses and nursing students remained the most
studied group, followed by physicians, mental health professionals, and then counsellors.
Author-written questionnaires were still very common in this decade, while the SAAS became
the most commonly used non-author-written measure. Qualitative studies were more common in
the 2000s than in any previous decade. In the early 2000s, researchers began to look at attitudes
toward individuals with dual diagnoses for the first time; many clinicians felt frustrated and
underprepared when working with these types of clients, but most blamed this on their lack of
training, rather than on the clients themselves. Attitudes in this decade were noticeably more
positive than those found in previous decades, although a minority of participants were
consistently found to hold negative and stigmatizing attitudes. Interestingly, several studies
found positive attitudes among participants who had a negative outlook on the prognosis for
recovery. The focus of many of the negative attitudes found during this time moved from the
addicted individual and their personal faults to their behaviours; for example, substance users
were often seen as being violent and manipulative. The notion that addiction is a societal
problem and not just a personal problem also became more prominent during this decade.
Knowledge was still found to be lacking in most studies that measured this variable, but most
clinicians reported a willingness to receive continued substance use education. Studies that
measured attitude changes due to educational interventions became increasingly common during
the 2000s and most found positive results; many of these interventions included experiential
activities and opportunities for self-reflection.
The 2010s have continued the trend of focusing on substance abuse in general, rather than focusing separately on either alcohol or drug addiction. The first study that looked at attitudes toward polysubstance dependence was conducted in the current decade. Studies that compare participants from various healthcare-related professions have become more popular in recent years and studies of nurses are still commonplace. Studies of counsellors and counselling trainees have occurred more frequently than ever during the past six years. The DDPPQ/AAPPQ has been the most commonly used measure of attitudes in the 2010s thus far, followed by the SAAS, MCRS, and MAQ. Belief in the disease model of addiction continues to decline, with mostly older and less educated participants endorsing this belief in recent studies. The conception of addiction as a coping mechanism has become more popular among today’s healthcare professionals and belief in the psychosocial model continues to be prevalent. Although attitudes appear to be continually improving, there is still a significant minority of students and professionals who hold negative and stigmatizing beliefs toward addicted individuals; a lack of sufficient addiction education for professionals also continues to be a serious issue.

Before focusing on the attitudes of counsellors towards substance use and substance users, it is worth highlighting the prominence of negative attitudes toward substance users by describing studies that compared health professionals’ attitudes toward different patient and client groups.

**Attitudes of Health Professionals to Different Patient/Client Groups**

There were a number of studies in the literature that compared participants’ attitudes toward different client and patient groups. These studies generally found more negative attitudes toward substance users in comparison to clients or patients suffering from other ailments, such as
physical disabilities (Christison et al., 2002; Fisher, Mason et al., 1975; Freed, 1964; Gilchrist et al., 2011; Larson, 1977; Schmid & Schmid, 1973), mental illnesses (Boyle et al., 2010; Christison et al., 2002; Gilchrist et al., 2011), and intellectual disabilities (Boyle et al., 2010). Several studies also found that, out of all patient groups, healthcare professionals had the least desire to work with, and the most negative attitudes toward, substance users (Barth, Demetrovics, & Bognar, 2007; Saitz et al., 2002; Vargas, 2011). Some studies had participants rate alcoholics in comparison to “normal” or “average” people; these studies found significantly more negative attitudes toward alcoholics (Fisher, Mason, et al., 1975; Mackey, 1969). As well, attitudes toward drug users were generally found to be more negative than attitudes toward alcohol users (Barth et al., 2007; Cannon & Brown, 1988; Christison et al., 2002; Deehan, Taylor, & Strang, 1997; Gilchrist et al., 2011; Mistral & Velleman, 2001; Sowa & Cutter, 1974).

There were some studies that were not as clear-cut in their findings on attitudes toward patients with SUDs. For example, Freed (1964) found that college students and psychiatric hospital staff were accepting of patients with physical disabilities, and non-accepting of patients with alcoholism or mental illness. However, staff were significantly more accepting of alcoholics than they were of people with mental illness. Given that the study did not specify what type of mental illness was implied by the term, it is possible that the participants completed the measure with regard to a more stigmatized mental illness such as schizophrenia, as opposed to a less stigmatized mental illness such as anxiety or depression, thus explaining why alcoholism was rated more positively. In another study, Boyle et al. (2010) found that undergraduate students rated SUDs more negatively than they did mental illness. Along the same lines, because the type of SUD was not specified, the students may have pictured a more severe form of substance use (e.g., intravenous heroin use) when completing the measure, thus explaining the more negative
SUD ratings. The study of medical students by Christison et al. (2002) provides support for this hypothesis; when treated separately, certain mental illnesses are rated more negatively than certain SUDs, and vice versa. In this study, participants reported the most positive attitudes toward patients with straightforward physical illnesses, and less positive attitudes toward, in descending order, patients with depression, anxiety, alcohol dependence, chronic schizophrenia, severe emphysema from smoking, problems with intravenous drug use, and somatoform illnesses. The results of these studies highlight the importance of being specific when asking for ratings about different groups of patients. The act of lumping together different SUDs and mental illnesses appears to lead to more negative ratings toward these two patient groups, and this must be taken into account when reporting results.

Studies that were more specific in their description of substance-using patients found that “hard-drug” (e.g., heroin) use was rated more negatively than “soft-drug” (e.g., marijuana) use. Some of these studies even showed somewhat glorified attitudes toward so-called “soft-drug” addicts. For example, Romney and Bynner (1972) looked at the attitudes of physicians and nurses working in a psychiatric ward toward four different patient groups: hard drug addicts (HDAs), soft drug addicts (SDAs), alcoholics, and people with mental illness. HDAs were given the worst ratings out of all groups; they were seen as dangerous, sexually unattractive, and psychopathic. SDAs, on the other hand, were rated the most positively out of all groups; they were seen as harmless, attractive, and assertive. Mentally ill patients and alcoholics were rated similarly, with slightly better attitudes found amongst the nurses toward alcoholics; the nurses rated mentally ill patients as being dangerous and alcoholics as being harmless. Lincoln, Berryman, and Linn (1973) had similar findings; they measured participants’ attitudes toward four different types of drug users, the police, and drug dealers. Drug treatment staff participants
rated police as the most favourable group, while students rated marijuana users more positively than they rated police.

In some studies, patients described as drug users were not rated less favourably than patients described as alcohol users. For example, Skinner, Feather, Freeman, and Roche (2007) found similarly positive attitudes amongst nurses toward hypothetical patients suffering from either alcohol or heroin dependence. The only difference found was that the nurses’ values did not predict attribution of responsibility for the patient with alcohol dependence, while the presence of conservative values did predict a higher attribution of responsibility for the patient with heroin dependence. Ferneau and Mueller (1971a) looked at the attitudes of psychology undergraduates and also found similar attitudes toward alcohol abuse and drug abuse. Knox (1976) looked at the attitudes of psychologists and psychology trainees and found, surprisingly, that participants were more willing to spend time with drug abusers than alcoholics.

Although substance using patients were generally rated more negatively than other patient groups, one study showed that the quality of care for these patients remained high. Segal and Dittrich (2001) used observers to rate the interactions between professionals (psychiatrists, nurses, social workers) and their patients in a hospital's psychiatric emergency services department. Interactions were rated on various measures of quality of care and the attitudes of clinicians toward patients were rated based on the clinicians’ actions, direct verbalizations, and perceived 'liking' of the patient. Substance use patients were rated to have received better quality of care than the other patients seen in the department, although the clinicians' attitudes toward them were not always rated as positive. Substance use patients were also less likely to be perceived as being liked by the clinician.
A qualitative study of district nurses by Peckover and Chidlaw (2007) provides some insight into how these negative attitudes toward substance users are manifested. In this study, it was noted that participants used individual and personal terms when describing all patient groups except the substance using patient groups. This suggests that the nurses had less humanistic attitudes toward the substance using population, as well as a diminished capacity to empathize with this patient group.

A common finding in the literature was that patients who were given a label such as “substance misuser” or “alcoholic” were rated less positively than those who were not, even when all other patient factors remained the same. Howard and Chung (2000), in their literature review on nurses’ attitudes, found that nurses rated hypothetical and simulated patients labelled as ‘substance misusers’ much more negatively across a wide range of personal characteristics than they rated identical patients without this label. In another study, Cornish and Miller (1976) presented nurses with one of two identical patient descriptions. One of the patients was labelled as an alcoholic suffering from job and family problems, while the other was not given a label. When asked to rate the patient, the group of nurses presented with the alcoholic patient endorsed more negative and less positive adjectives than the group presented with the unlabelled patient.

Wallston, Wallston, and DeVellis (1976) played a five-minute tape describing a simulated patient to two groups of nurses. One group was given the patient’s diagnosis before listening to the tape: he was an alcoholic who had been diagnosed with a bleeding ulcer. The second group was not given the diagnosis. A third group of nurses was given the diagnosis but did not listen to the tape. The nurses were then asked to rate the hypothetical patient and a 'stereotypical alcoholic' on a semantic differential scale. The patient was rated significantly more favourably when the nurses were not given his diagnosis; he was rated as more sane, healthy, and
sophisticated than the stereotypical alcoholic, and healthier than the patient with the diagnosis. The patient was rated more favourably than the stereotypical alcoholic when no diagnosis was given and rated the same as the stereotypical alcoholic when the diagnosis was given. The authors concluded that the stereotypes and stigma associated with alcoholism can exert a powerful influence on nurses’ perceptions of their patients who struggle with alcohol problems.

Biener (1983) presented various hospital staff with 14 vignettes describing substance abusing patients (SAPs) and non-substance abusing patients (NSAPs). Both patient groups varied in the severity of their illness, while only NSAPs varied in their responsibility for their illness. All SAPs were described as responsible for their illness. Participants rated patients on bipolar scales measuring: how rewarding they were to work with, the seriousness and chronicity of their illness, their responsibility for their illness, how cooperative participants expected them to be, and the degree of similarity between the patient and a close friend or family member of the participant. SAPs were rated significantly higher on responsibility, chronicity, and seriousness, and significantly lower on cooperation, similarity, and how rewarding they are to work with. Cooperation was the most significant predictor of an SAP being rewarding to work with, while for NSAPs this factor was seriousness.

Hanna (1991) studied the attitudes of psychiatrists and psychiatric residents working in either the acute psychiatric service (APS) or the alcohol clinic of an urban teaching hospital. The staffs’ attitudes were measured before and after completing an initial interview with a patient. Before the interview, the APS patients were given a questionnaire to measure the severity of their alcoholism and asked if they believed they had a problem with alcohol. Based on the results of these measures, the APS patients were broken up into four groups: non-problem drinkers
(NPDs), problem drinkers self-labeled (PDSLs), problem drinkers non-self-labelled (PDNSLs), and moderate drinkers (MODs). Interviewers were told which group the patient belonged to before the interview took place. A fifth patient group was made up of patients at the alcohol clinic (ACs).

APS interviewers rated NPDs as more likeable and attractive than other patient groups; this effect persisted after the interview, as well as influenced the manner of patient interaction and the treatment recommendations made. Residents working for the APS were more eager to work with NPDs than they were to work with PDSLs. PDSLs were seen as the least likeable patient group and interviewers were more likely to focus on the topic of alcohol while interviewing these patients. Likeability of PDNSLs decreased the most post-interview and they were also rated as the patient group with the least motivation; these patients reported that their therapists had dominated the interview and had jumped to conclusions about them. Eagerness to work with ACs changed the most post-interview and these changes were in a positive direction. ACs were rated as the most difficult patient group to form relationships with, and PDNSLs as the second most difficult (Hanna, 1991).

Rao et al. (2009) measured the attitudes of mental health professionals toward fictitious patients described as (a) having been admitted to a forensic psychiatric hospital, (b) having schizophrenia and an active addiction, or (c) being in recovery from addiction. They were also asked to rate (d) patients who had never had an addiction or mental health diagnosis, as a control. Highly stigmatized attitudes were reported for patients who had been admitted to a forensic psychiatric hospital, or who had an active SUD. Patients in recovery from a SUD were less stigmatized, although they were still not rated as favourably as control patients.
Only one study was found that did not show any differences in attitudes based on patient group. Rivers, Sarata, and Anagnostopulos (1986) compared the attitudes of different professional groups from the U.S.A. and New Zealand toward alcoholics, criminals, marijuana smokers, social drinkers, and mentally ill persons. They found differences based on profession and country but did not find that one 'deviant' group was rated significantly more negatively overall than any other.

**Summary.** Although several exceptions were found, the literature makes it quite clear that patients with SUDs are viewed less favourably than patients suffering from other ailments. When the type of SUD is specified, “hard-drug” (e.g., intravenous heroin, methamphetamine, or cocaine) use is generally viewed more negatively than alcohol use and tobacco use, while marijuana use was sometimes viewed in a positive and somewhat glorified light. In cases where the SUD is not specified, it appears that participants tend to respond negatively, and thus may be responding to measures with a more severe SUD in mind. It is important to take this into account when interpreting study data.

In the next section, I will describe research that has focused on counsellors’ attitudes toward substance use and substance users as well as factors that impact those attitudes. Significantly more research has been conducted with other health professionals (e.g., nurses, physicians, paraprofessionals) than with counsellors, so I have also included studies where counsellors were not the sole focus of the research.

**Counsellors’ Attitudes**

There have been relatively few studies conducted with counsellors on this topic. Given the importance of the therapeutic relationship in counselling and the potential for attitudes to affect its development, this is somewhat surprising. Of the available studies in the literature,
some have been conducted with counsellors or counselling students exclusively, whereas others have included other groups of participants as well. This section will review all of the studies on attitudes toward substance-using clients that have included counsellors over the years. Some of these studies are presented by their authors as having a clear focus on attitudes, while others are conceptualized and presented as focusing on beliefs rather than attitudes; however, due to the lack of studies specifically focused on attitudes, and to the close relationship between attitudes and beliefs, this section will include both types of studies.

Reinehr (1969) looked at the attitudes of a group of 16 therapists (including physicians, psychologists, social workers, and volunteers) who were conducting group therapy with inpatients at a treatment centre for alcoholism. Participants were given a list of 19 adjectives and asked to endorse the items that they thought were descriptive of alcoholic patients in general. The adjective checklist was also given to 50 of the alcoholic inpatients. There was very little agreement between the therapists and patients; the therapists viewed the patients as having many negative characteristics, while the patients saw themselves in a much more positive light.

Ferneau and Paine (1972) studied the attitudes of 11 paraprofessional volunteer alcoholism counsellor trainees at a large urban hospital in the U.S.A. The participants’ attitudes were measured using the MAQ prior to a ten-week alcoholism course and then compared to the norm group of employees at an alcohol and drug research foundation provided in the original MAQ study (Marcus, 1963). The participants were not re-tested after the alcoholism course. The volunteers had more positive attitudes than the norm group on five out of the nine MAQ subscales. Given that the participants in this study were volunteers who purposefully chose to work with alcoholics without compensation, it makes sense that their attitudes were found to be positive. An interesting finding in this study was that the participants were, like the norm group,
generally unsure as to whether emotional difficulties or psychological problems are an important contributing factor to the development of alcoholism. Given that counsellors primarily help clients by working through psychological problems and emotional difficulties, it was surprising to learn that the participants were unsure about the importance of these factors in the development of alcoholism. It was less surprising that the participants were unsure as to whether or not periodic excessive drinkers can be considered alcoholics, seeing as this study was conducted over 40 years ago when our understanding of alcohol dependence was less advanced. It is possible that the participants became less ambiguous in these beliefs after the ten-week alcoholism course but, as they were not re-tested, one can only speculate as to whether these changes occurred.

Hart (1975/76) conducted a similar study to the one described above but, in this case, used the MAQ to measure the attitudes of six rehabilitation counsellors employed at an inpatient alcoholism rehabilitation program. The attitudes of the counsellors in this study, when compared to the norm group, were also found to be of a more positive and therapeutic nature. As well, the participants were more likely to endorse the disease concept of alcoholism than the norm group.

Wechsler and Rohman (1982) asked 1106 students from nursing, medicine, social work, and counselling about exposure to alcoholism education, alcohol-related knowledge, etiology of alcoholism, willingness to work with clients with a drinking problem, preferred treatment modalities for working with alcoholics, beliefs about the prognosis of alcoholism, and attitudes toward having problem drinkers as patients. Compared to the other student groups, the counselling graduate students’ (n=133) attitudes were surprisingly negative. They were the least likely group to be interested in working with problem drinkers, and the most likely group to indicate that they would spend little to none of their professional time caring for these clients.
Counselling students were also significantly more pessimistic than nursing and social work students toward the prognosis of medical treatment for alcoholism. They were the least likely group to endorse the disease concept of alcoholism and the most likely group to report that alcoholics are very demanding patients. Regarding their attitudes toward treatment modalities, approximately one-third of counselling students thought that group therapy was a very good treatment, while only 9.2% endorsed individual therapy as a very good treatment for problem drinking.

In this same study, Wechsler and Rohman (1982) found that previous alcoholism education was related to higher levels of willingness to work with problem drinkers. Given that the counselling students in this study were the least likely group to have had previous alcoholism education, and the fact that 90% of the counselling student group admitted that they needed to know more about alcoholism, perhaps their unwillingness to work with this client group can be partially attributed to their lack of education. Still, no significant relationship was found between education and the attitudes measured in this study, suggesting that even if the counselling students in this study received further alcoholism education, their attitudes toward clients with drinking problems would most likely still be negative.

LoSciuto et al. (1984) used structured interviews to compare the beliefs and attitudes of drug abuse counsellors from three separate groups: professional counsellors (PROs), ex-addict paraprofessional counsellors (EXAs), and non-ex-addict paraprofessional counsellors (NEAs). The PROs held either bachelor’s or master’s degrees, while both paraprofessional groups had completed only a high school diploma or some college training. All participants in the study were employed at outpatient drug treatment clinics, some of which used methadone maintenance for opioid addiction and some of which used a drug-free treatment approach.
Surprisingly, very few differences were found between the three groups of counsellors. In general, the attitudes of all three groups were quite positive: participants agreed that clients are reachable, not criminal by nature, and capable of permanent change (LoSciuto et al., 1984). The counsellors also agreed that the client is the most critical factor in treatment success, peer pressure is the most salient cause of addiction, and poverty and discrimination are not important causative factors of addiction. This last finding is an interesting one, at least by today’s standards, given that poverty and discrimination are associated with traumatic events (Scher, Forde, McQuaid, & Stein, 2004), which are, in turn, associated with addiction (Khoury, Tang, Bradley, Cubells, & Ressler, 2010). However, considering that this study was conducted in 1984, when the connection between poverty, discrimination, trauma, and addiction was not well known, these results do not seem as surprising. Regarding differences among the groups, NEAs were found to be the most pessimistic about treatment outcomes, and EXAs were the most optimistic about the chances of their clients remaining abstinent one year after treatment. However, these differences were not of a great magnitude and, in general, most counsellors agreed that their clients would most likely require treatment again one year after leaving their current treatment program.

Interviews with the counsellors’ clients and administrators, for the most part, corroborated what the counsellors reported in their interviews (LoSciuto et al., 1984). The clients perceived that their counsellors found them reachable, not criminal by nature, and capable of permanent change. The administrators also agreed that the counsellors had generally positive attitudes toward, and relationships with, their clients. The only major difference found here was that clients of EXAs were slightly more positive about what they got out of their counselling sessions; they perceived their counsellors to be more knowledgeable about drugs and life on the
street, reported that they would be more likely to come to their counsellors with a wider array of both personal and drug-related problems, and reported that they expected and desired more counsellor participation in their therapy sessions. They were also more likely to believe that their counsellors would be there to support them in both counselling and non-counselling related activities. Despite the differences found in the beliefs of the clients, the most surprising finding of this study remains the lack of differences found between the three groups of counsellors, given their very disparate backgrounds.

Nurco et al. (1987) surveyed 900 clients and 237 personnel at various drug treatment clinics in the U.S.A. The authors did not report what percentage of the personnel in the study were counsellors, but did report that the personnel surveyed included counsellors, administrators, clinical supervisors, social workers, nurses, and physicians. The survey used in this study was the 142-item General Survey of Attitudes and Beliefs Regarding Addiction and its Treatment. In a factor analysis, the researchers found 10 major dimensions of attitudes and beliefs regarding addiction: Addicts Avoid Responsibilities, Drugs OK (there is nothing inherently wrong with using drugs), Addicts Need Control (addicts are dangerous and need to be controlled), Parents and Society to Blame (for addiction), Ex-Addicts Good/Meth Bad (ex-addict counsellors are good for treatment and methadone is not), Treatment Works, Sensation Seeking, Group Good/Meth Bad (group treatment is good and methadone is not), Easy Availability (easy availability of drugs is responsible for addiction), and Addict Friends (having friends who are addicts causes addiction).

The study found that the clients generally had more positive attitudes about addiction, its treatment, and the characteristics of addicts in general, when compared to the clinic personnel (Nurco et al., 1987). In the personnel group, it was found that education was related to greater
permissiveness toward addicts and drug use in general, as well as to the belief that parents and society are to blame for addiction. In contrast to most other studies in this literature review, the authors claimed that permissiveness, as well as placing the attribution of responsibility for addiction away from the client, are not, in fact, positive things. They argued that these views encourage neither the client nor the counsellor to act to move the client away from their state of addiction.

The authors of the above study also compared results on the survey based on clinic type and published these findings in another paper. They found that staff attitudes at clinics that used methadone as their primary treatment modality were more positive than the attitudes of the staff at the other clinics in the study, which were abstinence-based (Nurco et al., 1988).

Kahle and White (1991) looked at the attitudes toward alcoholism and alcoholic clients of 589 licensed psychologists and marriage, child, and family counsellors in California, U.S.A., using an author-written questionnaire. They found the attitudes of the two groups to be relatively homogeneous and fairly positive; where differences did occur, both groups remained on the same side of the issue. Most participants were willing to work with alcoholic clients and believed in a positive prognosis for treatment. Despite the finding that over three-quarters of the participants agreed with the disease concept of alcoholism, nearly half reported feeling uncomfortable being around alcoholics a lot, and over half viewed the alcoholic client as responsible for his or her illness.

Michaud, McDermott, Garner, and Lichtenberg (1992) studied the attitudes of 475 APA-member counselling psychologists toward alcoholism and alcoholics using a seven-page author-designed questionnaire. The questionnaire assessed attitudes using a semantic differential scale and also included questions on perceived comfort and expertise working with the alcoholic
patient group, knowledge, demographic information, previous education, and professional views and practices concerning the diagnosis and treatment of alcoholism and problem drinking. Most participants viewed alcoholics as generally wanting help, being treatable (although not curable), immature, troublesome in the office, and undependable. Participants also reported feeling comfortable, judgmental, friendly, knowledgeable, and reasonably optimistic when treating alcoholics. Interestingly, discomfort and perceived ignorance working with alcoholics and problem drinkers was associated with greater uncertainty on the knowledge scale, but not with lower overall knowledge scores.

Carroll (1993) looked at the attitudes of 242 various social care and health care staff (including 54 addiction counsellors) toward intravenous drug users. The author used a 30-item Likert-type scale to measure attitudes. The addiction counsellors were found to have the most positive attitudes out of all the groups; they also generally agreed that drug misuse is a treatable condition from which users can be rehabilitated. Despite these positive attitudes, there were still some counsellors who agreed that IV drug users should undergo compulsory HIV testing, that drug treatment should be confined to specialized units, that health and social services staff should have the right to refuse working with drug users, and that drug users are generally irresponsible.

Caplehorn et al. (1997) looked at the attitudes of 201 methadone clinic employees in New York, U.S.A.; the authors did not specify how many of these staff were paraprofessional or professional counsellors but did report the inclusion of these staff members in their study. They found that belief in abstinence-based treatment was positively correlated with disapproval of drug use and that knowledge was negatively correlated to both factors. Education and experience were found to be correlated with more positive attitudes toward clinic patients.
Hunot and Rosenbach (1998) conducted a study with 141 volunteer alcoholism counsellors in the United Kingdom. They used the Role Adequacy (RA), Role Legitimacy (RL), and Motivation (M) subscales from the AAPPQ (Cartwright, 1980) to measure attitudes. Role recognition was found to be a key factor in this study; volunteers who felt recognized by their agencies had higher scores on the RA and M subscales of the AAPPQ. Higher RA scores were also predicted by experience, with length of service being the most important aspect of experience. Scores on the RL scale were found to be positively correlated with support and training provided by the counselling agency, age, and experience. Volunteer counsellors who were enrolled in a diploma-level counselling courses had lower RL scores than those enrolled in master’s courses and those who had no previous counselling training. The authors hypothesized that the diploma students scored lower on this scale because of the developmental stage they were going through in their counselling careers, where they did not feel that they were necessarily entitled to work with alcoholic clients. Counsellors who received both individual and group supervision had higher RA scores than counsellors who only received one type of supervision; those who received only individual supervision had higher RA scores than those who received only group supervision. Interestingly, role support was not found to be an important predictor of attitudes in this study. The authors hypothesized that the needs of volunteers may be different than the needs of professionals and this was reflected in the finding that role recognition was found to be an important predictor of attitudes while role support was not.

Muldoon (1998) measured the attitudes of school counselling students using the SAAS, before and after five 35-minute lectures related to substance abuse. After the lectures, scores
improved significantly on the non-stereotypes subscale of the SAAS; there were no significant
effects of gender, age, or race found in this study.

West and Miller (1999) used the SAAS (Chappel et al., 1985) to measure the attitudes of
91 vocational rehabilitation counsellors. They found that counsellors who had received some
substance abuse training held more positive attitudes toward substance abuse and substance-
abusing clients than counsellors who had not. More specifically, their scores on the Non-
moralism and Treatment Intervention subscales of the SAAS were significantly more positive.
The authors concluded that counsellors with some type of substance abuse training were more
likely to accept addiction as a biopsychosocial disorder rather than a moral failing, and more
likely to hold positive expectations regarding the success of treatment interventions. The overall
attitudes of counsellors in this study were found to be significantly negative when compared to
the criterion group of substance use clinicians in Chappel et al.’s (1985) original SAAS study.

Carroll (2000) also looked at the effect of training, in this case previous training, on the
attitudes of counselling students. Students were read a case study suggestive of a client with the
DSM-IV diagnoses of major depressive disorder, alcohol and benzodiazepine dependences, and
borderline personality disorder. They were then asked questions about how they would work
with or refer this client and why, to help elucidate their worldview of substance dependence.
Students with more than 45 hours of previous addictions education or training were more likely
to refer or treat the hypothetical client for their addiction, rather than for one of their other two
disorders. These students were also more likely to conceptualize addiction as a distinct entity,
requiring immediate attention and aggressive treatment. Students with less than 45 hours of
addictions instruction were more likely to treat or refer clients for a different problem other than
their addiction; they were also more likely to view addiction as just one of many problems
embedded within the context of the client’s life. This study did not address how different conceptions of addiction might relate to attitudes, but one could speculate that having a better understanding of how powerful addiction can be might allow a counsellor to have a more realistic, positive, and empathic view of their substance-using client.

Forman et al. (2001) studied the attitudes of 317 addiction professionals, 132 of whom were counsellors, toward addiction and its treatment. An 18-item scale measured attitudes toward five different factors: Innovation, 12 Step/Traditional Treatment, Confrontation, Medication, and Spirituality. The main finding of this study was that education and experience were negatively correlated with endorsement of confrontational treatment modalities and the discharging of noncompliant patients, and positively correlated with the endorsement of methadone maintenance as well as the use of psychiatric medication in addictions treatment. Counsellors in this study were mostly masters-level educated, so their results fell somewhere between the more highly educated participants (psychiatrists and participants with doctoral degrees) and the less highly educated ones (clerical/support workers and case managers). Although support for confrontational approaches among counsellors in this study was low, many counsellors still believed that non-compliant patients should be discharged, and that confrontation should be used more in drug treatment. Counsellors had moderate support for innovation in drug treatment and were the most likely group to endorse 12 step and traditional treatment programs. Support for the use of more spirituality in drug treatment was high in this study.

Dunston-Mclee (2001) used the Dual Diagnosis Attitude Survey (developed from the BSAAS) to measure the attitudes of 200 certified and non-certified rehabilitation counsellors toward dually diagnosed clients. The study found that counsellors who had frequent contact with dually diagnosed clients and over 15 hours of dual diagnosis training were more optimistic about
dual diagnosis and its treatment than those who had less frequent contact or 15 hours or less of training. As well, non-certified rehabilitation counsellors were found to have more positive attitudes toward integrated treatment for dual diagnoses than certified rehabilitation counsellors. Overall, the study found positive attitudes toward dually diagnosed clients.

Ball et al. (2002) conducted a study with 75 community clinicians, most of whom were experienced counsellors, and found that they generally reported little difficulty in liking their clients with SUDs, and that they were mostly optimistic about treatment outcomes.

Koch et al. (2006) piloted an instrument called the Counsellor Trainees Attitudes Measure (CTAM) with a group of 74 undergraduate and graduate counsellor trainees. They found that participants who had an experience with someone close to them having a SUD were more likely to adhere to the medical and natural models\(^2\) of recovery, and less likely to adhere to the moral model of recovery, than were participants who did not have such an experience. Undergraduate students without this experience were most likely to adhere to the medical model, followed by the moral and natural models, whereas graduate students without this experience were most likely to adhere to the moral model, followed by a tie between the natural and medical models. The authors concluded that having an experience with a close person having a SUD leads to the development of more positive attitudes toward clients with SUDs.

Davis et al. (2010) used a refined version of the CTAM to look at the attitudes of 148 undergraduate and graduate college students enrolled in courses in the rehabilitation department at a university, with around 35% reporting counselling as their planned future profession. Similar results were found to the previous study: being or having a family member in recovery was

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\(^2\) The authors do not define the natural model of recovery. A Google search suggests it can mean recovery without treatment or it can refer to holistic recovery that is more in line with the biopsychosocial model. This model was not used in the second CTAM study (Davis et al., 2010).
associated with greater adherence to the medical model and less adherence to the moral model of addiction. Students who had taken more courses related to alcohol and drug addiction were found to have more positive attitudes toward substance use and persons with SUDs overall. Graduate students were found to have less positive attitudes when compared to undergraduate students, but the number of graduate students who had completed multiple courses on alcohol and drug addiction in this study was low compared to the number of undergraduate students who had done so.

Broadus et al. (2010) used the Addiction Belief Inventory (Luke et al., 2002) to measure the addiction beliefs of 215 addiction educators in the U.S.A., 50% of which were licensed or certified addiction counsellors. They found that most educators thought of addiction as a coping mechanism, not a moral failure, and did not endorse that addiction gets worse over time. Those participants who were counsellors were less likely to endorse the moral model of addiction. Participants did not endorse recovery without help, the ability to control use, or the social use of substances post-treatment. Those participants with less education and more experience as an educator were more likely to endorse the disease model and the inheritability of addiction.

Rodgers-Bonaccorsy (2010) used the DDPPQ (Watson et al., 2006) to measure the attitudes of 764 certified rehabilitation counsellors toward drug-misusing clients; a 7-item instrument was also used to measure perceived confidence in providing substance abuse screenings and referrals. Participants reported generally positive attitudes overall, except for in the job satisfaction subscale, where near neutral attitudes were reported. Hours of substance abuse training, role adequacy, role-related self-esteem, role support, and role legitimacy predicted confidence in providing substance abuse screenings and referrals to clients.
Russell, Davies, and Hunter (2011) used the Addiction Belief Scale (ABS; Schaler, 1995) to measure the addiction beliefs of 854 addiction treatment providers in the U.S.A. and U.K.; although the number of counsellors in this study was not reported, 516 participants did report that they used psychotherapeutic methods when treating clients, so it is likely that many of these participants were counsellors. Belief in the disease model of addiction was associated with the following factors: practicing in the U.S.A., working in for-profit treatment, having greater spiritual beliefs, being older, having a personal history of addiction, being a member of a group of addiction professionals, and having more experience treating addiction. The opposite was true for belief in the choice model of addiction. Practitioners in the U.K. were more likely to believe in the choice model of addiction and in addiction as a way of coping with life. The authors did not make an argument for a particular model of addiction as being more representative of positive attitudes. According to the ABS study (Schaler, 1995), individuals who believe more strongly in the disease model of addiction also believe that a lower percentage of individuals will recover from addiction without any sort of treatment. One could argue that this belief represents a positive attitude because it recognizes the power of addiction, but also that it represents a negative attitude because it is a more pessimistic view of addiction in general.

Chasek et al. (2012) used the SAAS to measure the attitudes of 64 students enrolled in graduate-level counselling courses. They found that treatment optimism was positively correlated with non-stereotyping and treatment intervention attitudes when looking at these factors both individually and in combination with each other. The researchers concluded that treatment intervention and non-stereotyping attitudes must therefore be addressed in addiction counselling courses.

3 The choice model of addiction contradicts the disease model and holds that individuals can choose whether or not to use drugs; the model does not recognize any sort of drug-related impairment to the decision-making process.
Balich et al. (2015) used the SAAS to measure the effect of a 15-week experiential course on the attitudes of 64 counsellor trainees. Participants’ attitudes improved in the domains of non-stereotyping and treatment intervention but remained unchanged in permissiveness and non-moralism. Although the effect size was small, the students reported in their course journals that they had been deeply changed and that they understood the struggle of addiction significantly more than at the start of the course.

Macleod (2015) conducted a similar study with 38 counsellor trainees enrolled in a graduate-level substance abuse course. The author used the SAAS to measure attitudes and the Emotional Empathic Tendency Scale (EETS) to measure emotional empathy before and after completion of the course. The results of the students in the substance abuse course were compared to a control group. The experimental group’s non-stereotyping scores on the SAAS approached a significant difference to the control group’s after the course (p=.051). The experimental group had greater increases in EETS scores than the control group after the course, but this difference was not significant. The students in the experimental group, who had more training and experience in substance abuse counselling, as well as personal experience with substance abuse, had significantly higher pre-test treatment optimism scores than the control group.

Summary. A thorough review of the literature makes it clear that there is a relative paucity of research when it comes to studying the attitudes of counsellors toward their substance-misusing clients or the factors that affect those attitudes. Only 25 studies were conducted on these topics in a period of 47 years. The research that has been done suggests that, in general, counsellors have positive attitudes toward substance-using clients; they are willing to work with this client group and are generally positive about the prognosis of SUD treatment. When
compared to other groups, most studies found that counsellors’ attitudes were the most positive; in the studies where this was not true, the more negative attitudes of the counsellors were at least partially related to their lower levels of education in comparison to the other groups. Although the presence of negative attitudes amongst counsellors appears to be declining over time, most studies did find a significant minority of counsellors who held stigmatizing and stereotypical attitudes and beliefs about the substance-using population. Some studies also found counsellors who reported feeling uncomfortable being around people with SUDs. Despite the fact that counsellors who harbour negative attitudes appear to be in the minority, these negative attitudes still have the potential to do a great deal of harm, as it is very likely that these counsellors end up having sessions with clients with SUDs, if not by choice, then simply by chance.

Unfortunately, the vast majority of studies that have been conducted with counsellors are based on data collected before 2010, with over half having been conducted before the year 2000; only two studies were found that have been published within the last five years. These older studies likely do not reflect recent changes in societal views on SUDs and thus their current relevance is called into question. Many of these studies have also used measures with poor reliability of scores, such as the SAAS, or have used attitudinal measures that have no psychometric data to support their reliability or validity. This raises questions about the overall findings of these studies. The one study (Rodgers-Bonaccorsy, 2010) that did use a measure with good reported reliability of scores, Watson et al.’s (2006) DDPPQ, looked at the effect of various factors on rehabilitation counsellors’ perceived confidence in providing substance use screenings and referrals; this study looked at a very specific type of counsellor and did not look at the factors that predict attitudes. The seemingly limited quality research on this important topic further highlights the need for more research in this area today.
Studies that look at the possible predictors of counsellors’ attitudes have the potential to provide evidence for possible solutions to the problem of negative counsellor attitudes and, as such, should be considered just as important as descriptive attitudinal studies. Education, work experience, and previous addiction history were the only commonly investigated factors in the literature on counsellors. Research on other professionals suggests that it would also be important to look at other factors that have only been researched sparsely and inconsistently, if at all, in studies with counsellors. The next section will examine these potentially important factors.

Factors Affecting Attitudes Toward Substance Use and Substance Users

Attitudes are complex psychological constructs, and their development is an even more complex process involving the interaction of many interrelated factors. This section will discuss the factors that have been previously investigated as possibly being related to attitudes towards substance use and substance users, providing a rationale for the factors that were chosen to be included in the current study.

**Work Factors.** A variety of work-related factors were investigated as possible predictors of attitudes. However, only some of these factors were consistently found to be important.

**Work Setting.** Some studies investigated the effect of work setting on the attitudes of staff. These studies found that setting did not have a consistent influence on attitudes. Lemos and Moran (1978) found that psychologists, psychiatrists, and nursing assistants who worked in a specialized alcoholism treatment unit had similar attitudes to their colleagues who did not work in such units. They also found that social workers and registered nurses who worked in these settings showed somewhat more positive attitudes, and licensed practical nurses who worked in these settings showed somewhat more negative attitudes. Nilsen et al. (2013) found similarly positive attitudes toward drug using patients in a group of hospital employees, when compared to
the attitudes of a group of staff working at inpatient mental health treatment centres (Howard & Holmshaw, 2010). Berger-Gross and Lisman (1979) compared staff at a residential treatment centre with staff at a sobering-up station. They found more positive attitudes toward alcoholism treatment among the staff at the treatment centre, but also found that these staff had more custodial attitudes than the staff at the sobering-up station. Sullivan and Hale (1987) found that the size and type of institution nurse that participants worked at had no bearing on attitudes toward alcoholism.

Nurco et al. (1988) compared the attitudes of staff at three types of drug treatment clinics: methadone only (M), methadone, abstinence and naltrexone (MAN), and abstinence only (A). M clinic staff had the least negative attitudes, while MAN clinic staff had the most negative view of addicts and their prospects for successful treatment. Hanna (1991) found that psychiatrists and psychiatric residents working in an alcoholism treatment clinic were able to maintain more objectivity when rating patients labelled as problem drinkers than were their colleagues working in acute psychiatric services.

Gilchrist et al. (2011) compared the attitudes of healthcare professionals from primary care, general psychiatry, and specialist addiction services. They found the best attitudes toward substance using patients among staff working in specialist addiction services (these staff included psychologists and social workers as well as medical professionals), followed by those employed in general psychiatry, and then primary care. In a similar study, van Boekel et al. (2014) found more positive attitudes in health care professionals who worked at substance use treatment clinics, when compared to those who worked at primary care or psychiatric treatment clinics. Cartwright (1980) attempted to look for factors that contribute to therapeutic attitudes other than experience, support, training, and self-esteem; there was no difference in the
therapeutic attitudes of their participants based on age, sex, profession, or number of years in their profession. The only other factor found to be related to attitudes in this study was the amount of time a participant had spent working for a specialist alcoholism agency.

**Work Experience.** The effect of job experience on attitudes was also found to be variable. Some studies showed a positive effect of experience (Albery et al., 2003; Bush & Williams, 1988; Caplehorn et al., 1997; Cartwright, 1980; Ding et al., 2005; Forman et al., 2001; Gorman & Cartwright, 1991; Hunot & Rosenbach, 1998; Lightfoot & Orford, 1986; Macleod, 2015; Mogar et al., 1969; Saitz et al., 2002), while others showed a negative effect (Abed & Neira-Munoz, 1990; Carroll, 1995; Fisher, Keeley, Mason, & Fisher, 1975; Gilchrist et al., 2011), and many showed no effect at all (Howard & Holmshaw, 2010; Levitt, Baganz, & Blachly, 1963; Lincoln et al. 1973; Nilsen et al., 2013; Schmid & Schmid, 1973; Strauser, Ciftci, & O’ Sullivan, 2009; Sullivan & Hale, 1987). Cartwright (1980) found that experience was one of the necessary conditions for the development of positive therapeutic attitudes. According to the theory of therapeutic attitudes outlined in the Cartwright (1980) study and developed during the Maudsley Alcohol Pilot Project (MAPP), factors such as education, personality, and work environment do not influence therapeutic attitudes unless the individual in question has a baseline level of experience.

Some studies found results that were less straightforward. Heinemann and Rhodes (1967) found that among supervisory, head, and staff nurses, newer staff members had more positive treatment attitudes, but long-term staff were more sympathetic and understanding, toward their alcoholic patients. Ferneau and Morton (1969) found relatively stable attitudes toward alcoholics and alcoholism among nurses and nursing assistants over a one-year period, although the nurses became somewhat less ambivalent and conflicted in treating alcoholics, and somewhat more
therapeutically, rather than moralistically, oriented in their attitudes. The belief that underwent the most notable change for the nurses was the recognition that periodic excessive drinking (binging), not just continuous excessive drinking, can also be classified as alcoholism.

Cannon and Brown (1988) found that, although experience had little influence on attitudes, the number of years that a participant had spent in their current job was negatively correlated with attitudes. This negative correlation may have been due to another factor, such as workplace burnout, and not due to experience itself, but the study did not investigate this possibility. Russell et al. (2011) found that experience as an addiction treatment provider was positively correlated with belief in the disease model, as opposed to the choice model or the belief that addiction is a way of coping with life; however, it is unclear whether this belief represents a positive attitude.

**Role Support.** Role support, as defined by Cartwright (1980), refers to the perceived availability of colleagues in the workplace who can help to clarify professional responsibilities and assist with specific client-related issues or personal difficulties encountered while on the job. This factor was found to be important in contributing to attitudes on its own and not just in the context of training and education. Cartwright (1980) found that role support and experience were, in fact, the most salient factors involved in the development of therapeutic attitudes.

Allen (1993) found generally positive attitudes among nurses working at a community hospital, and generally negative attitudes among nurses working at a large university hospital. The community hospital was different in that it had an alcohol and drug treatment program in the building and offered substance use inservice education and consultation to its nurses, while the university hospital had no such programs or services. Davies and Huxley (1997) found that GPs who accessed specialist support services had more positive attitudes than those who did not.
Albery et al. (2003) and Rodgers-Bonaccorsy (2010) found that positive attitudes were positively correlated with perceived role support. Ford et al. (2008) found that role support was, by far, the greatest predictor of nurses having positive therapeutic attitudes toward illicit drug-using patients when compared to other variables such as the personal characteristics of the participants, education, and experience. Lightfoot and Orford (1986) also found role support to be a significant contributor to therapeutic attitudes.

Not all studies found that role support influenced attitudes. Happell and Taylor (2001) found that nurses who accessed a drug alcohol liaison service had similar attitudes and confidence to nurses who did not; however, the nurses who accessed the service did report higher levels of perceived knowledge.

Role support was shown to be lacking in several studies, thus possibly having a negative effect on attitudes. Howard and Holmshaw (2010) interviewed a subset of their participants in their study of staff at inpatient mental health treatment centres. The staff reported wanting more individual and group supervision when working with substance using clients and that they had a lack of access to knowledgeable experts on substance use.

**Situational Constraints.** Another factor that came up, particularly in more recent research, was the effect of situational constraints on attitudes. These constraints refer to work-related variables such as patient load, stress, time pressure, organizational issues, and problems with morale in the workplace. Situational constraints were found to have a negative effect on attitudes in the studies in which they were measured (Lightfoot & Orford, 1986; Albery et al., 2003; Ding et al., 2005). Moreover, Lightfoot and Orford (1986) and Albery et al. (2003) showed that, like role support and experience, situational constraints play a key role in contributing to therapeutic attitudes; just as role support and experience must be at a baseline level to facilitate
the development of positive therapeutic attitudes, the level of situational constraints must remain below a certain threshold if positive therapeutic attitudes are to develop.

**Confidence.** Perceived confidence in skills related to treating patients with SUDs was often found to be positively correlated to attitudes. Geller et al. (1989) found that medical students and staff at a university teaching hospital who had greater perceived confidence in their ability to provide alcoholism screenings and referrals also felt more responsible for providing these services, and did, in fact, provide these services more often than those participants who lacked this confidence. Similarly, participants who were confident in their abilities and provided more screenings and referrals also tended to have a more positive outlook on treatment outcomes for alcoholism. Gerace et al. (1995) found that nurses who had more confidence in their clinical skills were also more willing to discuss substance abuse problems with patients. Van Kampen (2010) found that students enrolled in a master’s level substance abuse course who were confident in their ability to work with alcoholics were less likely to believe that alcoholics are weak-willed individuals. Confidence in treatment effectiveness was also shown to be associated with positive attitudes (van Boekel et al., 2014).

**Occupational Contact.** Studies that investigated the relationship between occupational contact with addicted individuals and attitudes toward these clients found mixed results. Levitt et al. (1963) found that hospital employees who had direct contact with addicted patients held less cynical attitudes; they were less likely to refer to their patients as undesirable characters and less likely to endorse their punishment, as compared to employees who did not have direct contact. Mogar et al. (1969) also found that hospital employees with the most contact, in this case with alcoholic patients, had the most positive attitudes; they were less moralistic and more optimistic toward treatment outcomes. Abed and Neira-Munoz (1990) found more positive attitudes toward
drug users among GPs who had such patients on their caseloads. Dunston-Mclee (2001), in a study of rehabilitation counsellors, found that counsellors who had frequent contact with dually diagnosed clients were more optimistic about their treatment. In a study of GPs and various psychiatric and addiction services professionals, van Boekel et al. (2014) found that participants who worked with substance using patients more frequently had more positive attitudes. Gassman (1997) found more positive attitudes toward alcoholism among graduate social work students who were direct-practice majors than among those who were non-direct-practice majors. Ding et al. (2005) found that physicians who had more HIV positive intravenous drug users on their caseload had more positive attitudes toward this patient group.

Strikingly different results have been found in other studies. Johnson (1965), in a study of nurses’ attitudes toward treating alcoholics, found that the 20% of nurses who reported either ambivalent or negative attitudes had the most contact with alcoholic patients. Heinemann and Rhodes (1967) found similar results in their study of nursing staff; direct contact with alcoholic patients was inversely correlated with positive attitudes. Nurses reported feeling frustrated and discouraged working with this patient group, seeing them as difficult to manage. They also generally disagreed that alcoholics should be treated in hospitals. It is important to note though that, in this study, nurses also reported that they did not feel qualified to work with alcoholics and felt they needed more education in this area. In a study on addiction treatment centre staff, Sowa and Cutter (1974) also found more negative attitudes among staff who had more patient contact.

Brener, von Hippel, and Kippax (2007) examined both explicit and implicit attitudes. In their study of healthcare professionals, they found that contact was positively correlated with explicit attitudes, but negatively correlated with implicit attitudes.
Summary. Studies that investigated various work-related factors had mixed results; however, most of the studies that looked at these factors found them to be significantly related to attitudes. Role support, work experience, confidence, and occupational contact were all consistently found to be positively related to more positive attitudes whereas situational constraints tended to be negatively correlated to more positive attitudes. Studies that investigated work setting as a factor on its own were less consistent in their findings. However, studies that compared the attitudes of staff working at specialized addiction clinics to staff working in non-specialized settings consistently found more positive attitudes among staff working at specialized clinics. These staff members likely have more role support, addictions-related work experience, confidence, and occupational contact with substance misusers, and are also likely to experience fewer situational constraints. Given that all these factors have been found to be significantly related to attitudes, it makes sense that specialized clinics are more conducive to the development and maintenance of positive clinician attitudes. The work-related factors discussed in this section have consistently been shown to have significant relationships to attitudes; therefore, the inclusion of these factors in the current study was justified.

Addictions Training and Related Factors. Education, training, and level of specialization were all found to be important factors. Knowledge was less frequently found to be associated with attitudes.

Education and Training. Education and training were shown to be good predictors of positive attitudes in the majority of studies that measured these variables (Albery et al., 2003; Allen, 1993; Bush & Williams, 1988; Cannon and Brown, 1988; Caplehorn et al., 1997; Davis et al., 2010; Dunston-Mclee, 2001; Estes & Gurel, 1979; Forman et al., 2001; Heinemann & Rhodes, 1967; Howard & Chung, 2000; Howard & Holmshaw, 2010; May et al., 2002; Mogar
et al., 1969; Macleod, 2015; Nurco et al., 1987; Poldrugo et al., 1986; Selleck & Redding, 1998; Van Kampen, 2010; West & Miller, 1999). In a recent study of 215 addiction educators, it was found that most participants thought of addiction as a coping mechanism and not a moral failure (Broadus et al., 2010). This national sample of American educators were most likely teaching their addictions courses from this perspective, thus creating an opportunity for students’ attitudes to become more positive. Moralistic judgements of substance misusers are certainly still common in the present day, but these judgements do not seem to reflect what is being taught at various colleges and universities, so it is unlikely that addictions education leads to the development of more negative attitudes among students. As well, education and training can lead to increased interest in working in the addictions field among students and professionals. For example, Miller and Frances (1986) found that psychiatrists who were interested in working with addicted patients cited training as the second most influential factor responsible for their interest in working in the addiction field.

Despite the substantial number of studies that found a positive correlation between addictions education and attitudes, the effect was not always found to be clear-cut. For example, Wechsler and Rohman (1982) found that exposure to alcoholism education was not associated with positive or accepting attitudes towards problem drinkers; however, they did find that willingness to work with alcoholics was higher in students who had previously shown an interest in alcoholism education.

Amount of education, as measured by degree level, was found to be related to beliefs about addiction. Broadus et al. (2010) found that addiction educators with less education were more likely to endorse the disease model and the inheritability of addiction and less likely to believe that addicted persons can learn to drink socially with treatment. Although the disease
model is sometimes seen as representative of positive attitudes, in this study, it seems to represent a more negative one; the accompanying belief suggests that an addicted person cannot fully recover from their addiction. Humphreys, Noke, and Moos (1996) found that level of education was negatively correlated with endorsing the disease model of addiction, and positively correlated with endorsing the psychosocial model. Although it is not totally clear which of these models represents a more positive attitude, it could be argued that the psychosocial model is less reductive and pathologizing, and therefore more positive.

The relationship between amount of education and attitudes was sometimes found to be more complex. Sullivan and Hale (1987) found that nurses educated in diploma programs and those with master's degrees had more positive beliefs about alcoholics than nurses with baccalaureate training and those with doctoral degrees. Surprisingly, nurses with doctoral degrees were actually the most likely to endorse the moral weakness etiology of alcoholism in this study. In a study of mental health professionals, Richmond and Foster (2003) found that postgraduates were more optimistic about treatment than non-graduates, but not graduates. Strauser et al. (2009) found that community rehabilitation service providers with a university degree had less stigmatizing attitudes toward clients with a cocaine addiction than service providers without a degree; however, participants with a master’s degree had more stigmatizing beliefs toward these clients than participants with a bachelor’s degree. A study of students who were enrolled in rehabilitation courses also found that undergraduates had more positive attitudes than graduate students, although the number of graduate students who had completed multiple courses on addiction was low compared to the undergraduates (Davis et al., 2010).

Gerace et al. (1995) found that nurses with more formal education were more likely to participate in activities to increase their substance abuse knowledge and that participation in
these activities was associated with increased confidence in clinical skills. This suggests that, although past education may not always be a good predictor of attitudes, it may be a good predictor of a person’s likelihood of seeking out substance abuse related educational opportunities in the future, thus leading to an increased likelihood of improving clinical skills, confidence, and consequently, attitudes.

Carroll (2000) found differences in the behaviours and beliefs of counselling students who had previously had more than 45 hours of instruction on addictions, when compared to students who had had less than 45 hours of such instruction, but it is unclear how these behaviours and beliefs might have reflected their attitudes. Students were read a client case study that was suggestive of the DSM-IV diagnoses of major depressive disorder, alcohol, cocaine and benzodiazepine dependencies, and borderline personality disorder. Students with more than 45 hours of addictions instruction were more likely to report that they would treat or refer the client for their addiction, rather than for another disorder, and more likely to conceptualize addiction as a distinct entity requiring immediate and aggressive treatment. In contrast, the students with less than 45 hours of addictions instruction were more likely to report that they would treat or refer the client for a different problem other than the SUD and were also more likely to view addiction as just one of the many problems embedded within the context of the client’s life.

Despite the consistent relationship found between the presence of addictions training and positive attitudes, a lack of such training was not always found to equate with negative attitudes. Kelleher and Cotter (2009) found satisfactory knowledge and attitudes among a group of physicians and nurses, despite the fact that most participants had never had any specialized addictions training. However, the participants in this study did express a deficit in knowledge about addiction intervention strategies and knew more about alcohol than they did about illicit
drugs. Crothers and Dorrian (2011) also found neutral to positive attitudes toward alcoholics among a group of nurses who had never received any specialized drug or alcohol training; these nurses also reported feeling competent enough to work with alcoholic patients despite their lack of training.

Some studies found that education and training were negatively correlated with attitudes (Engs, 1982; Fisher, Keeley, et al., 1975; Geller et al., 1989), and some found that education and training had little to no effect on attitudes at all (Lemos & Moran, 1978; Moodley-Kunnie, 1988; Pillon & Laranjeira, 2005; Richmond & Foster, 2003; Tolor & Tamerin, 1975). A study of rehabilitation counsellors found that those counsellors who were certified and had thus received formal training in rehabilitation counselling from an approved educational institution, had more negative attitudes toward the integrated treatment of mental health and addiction than their noncertified counterparts (Dunston-Mclee, 2001).

Education was sometimes shown to influence attitudes only when certain other conditions were met. For example, a large study of nurses (N = 1605) found that education did not have an independent effect on attitudes; when a moderate amount of role support was reported, education had a positive effect on attitudes, but when this role support was not present, education did not have an effect (Ford, Bammer, & Becker, 2009). The authors defined role support as “the availability of others with whom the nurse could readily and easily discuss personal difficulties, clarify professional responsibilities and formulate the best response to clinical issues” (pp. 114-115). Cartwright (1980) found that, without a baseline level of role support and experience, education did not have a positive effect on attitudes. Lightfoot and Orford (1986) and Albery et al. (2003) proposed that a third factor, which they called ‘situational constraints,’ also needed to be at a certain level, in this case below a certain threshold, for a
variable such as education to have a positive effect on attitudes; their research supported this hypothesis. Situational constraints, as discussed in the above section, refer to work-related factors such as patient load, stress, time pressure, organizational issues, and problems with morale in the workplace.

Although the effect of education and training on attitudes was not found to be completely consistent in the literature, there was a clear finding of a general lack of knowledge and training for healthcare professionals in the area of substance use. McLaughlin and Long (1996) found, in their literature review, that inadequate training was a major theme in most studies of healthcare professionals, and they hypothesized that this was related to the generally negative, stereotypical, and prejudicial attitudes found amongst the participants in the studies included in their review.

Healthcare professionals often expressed a need for more specialized training and were generally dissatisfied with the management of the substance using patient group. For example, Siegfried, Ferguson, Cleary, Walter, and Rey (1999) found that 95% of mental health professionals in their study were willing to participate in further education and training, and that most considered the management of the substance using patient group as difficult and currently inadequate. In a qualitative study of GPs, McKeown, Matheson, and Bond (2003) found that a common theme reported by participants was a lack of education about working with substance misusers. Howard and Holmshaw (2010) found similar results in a group of mental health treatment staff. Peckover and Chidlaw (2007) also found a lack of knowledge and understanding in their qualitative study of nurses, and this was seen by their participants as a barrier to providing empathic care. Even highly trained professionals such as psychiatrists were found to be undereducated in the area of addictions. Avery et al. (2013) found that community
psychiatrists reported inadequate knowledge for working with patients with polysubstance dependence, despite often encountering these patients while on the job.

McGillion, Wanigaratne, Feinmann, Godden, and Byrne (2000) found that, although most GPs in their study felt responsible for detecting opiate misuse among patients in their practice, less than half felt they had adequate knowledge to work with such patients. Johnson (1965) found that most nurses in her study reported feeling responsible for providing counselling for their alcoholic patients and consultation for the families of these patients; however, they also reported that they felt unqualified to provide these services and that they needed further alcoholism-related education. In a Brazilian study, Pillon and Laranjeira (2005) found that 95% of the nurses and nursing students surveyed reported having received little to no information on nursing procedures for patients with alcohol use problems.

Although most studies found that professionals were willing to participate in further education and training, this was not always the case. Mistral and Velleman (2001) found that GPs expressed a need for more substance use training, but 66% of their sample reported being unwilling to attend such trainings, citing time and work constraints as barriers. A study on healthcare workers found a similar unwillingness to receive substance use education; participants in this study feared that, if they received further education, they would then be forced to take on more drug using patients (McLaughlin, McKenna, Leslie, Moore, & Robinson, 2006).

A common theme that often accompanied reports of inadequate training was the belief that patients suffering from SUDs, particularly those involving illicit drugs, should be seen by specialists, and not in primary care settings (Carroll, 1993; Deehan et al., 1997; McLaughlin et al., 2006; McLaughlin & Long, 1996). A reported lack of knowledge and training for working
with dually diagnosed patients was also common (Deans & Soar, 2005; Happell, Carta, & Pinikahana, 2002).

**Specialization.** Many studies provide support for the hypothesis that specialization in addictions is associated with more positive attitudes (Avery et al., 2013; Bush & Williams, 1988; Carroll, 1993; Gilchrist et al., 2011; Mogar et al., 1969; Sterne & Pittman, 1965; van Boekel et al., 2014). Professionals who specialize in addictions receive more addiction-related education and training, spend more time with addicted patients, and possibly start out with more positive attitudes towards addictions in the first place, having chosen a career in the field. This means that they are likely more knowledgeable, confident, and skilled at working with this patient group, and thus more likely to develop positive attitudes that will be reinforced through experience.

There were also some studies that showed that specialized training does not influence attitudes (Lemos & Moran, 1978; Moodley-Kunnie, 1988; Sullivan & Hale, 1987). It is possible that professionals who spend most of their time treating addicted patients start out with more positive attitudes than their non-specialist counterparts but end up becoming burnt out with this patient group, or possibly become less optimistic about treatment prognosis after seeing the destructive reality of SUDs first-hand. It is worth noting that the studies supporting the positive effect of specialization on attitudes are more recent, and attitudes toward substance use have become more positive over recent years, so it is likely that specialization does indeed correlate with positive attitudes. However, there may be nothing special about specialists, aside from their training, experience, and support. Bush and Williams (1988) found that, when experience, training, and role support were controlled for, there was no difference between the attitudes of specialist and generalist health and welfare workers.
Knowledge. Several studies measured participants’ basic knowledge about substance use (e.g., knowledge about symptoms, diagnosis, treatment, physiology, biochemistry, epidemiology, and associated problems) and looked at it as a possible factor related to attitudes. Most of these studies found that knowledge is not related to attitudes (Bush & Williams, 1988; Geller et al., 1989; Jacka et al. 1999; Kinder, 1975; Michaud et al., 1992; Robinson et al., 1993; Wechsler & Rohman, 1982). Furthermore, Giannetti, Sieppert, and Holosko (2002) found no correlation between knowledge about alcoholism and reported satisfaction in working with alcoholics among social workers.

Some studies did find a correlation between positive attitudes and knowledge. For example, Heinemann and Rhodes (1967) found that nursing supervisors and head nurses had more favourable attitudes toward alcoholics and more knowledge about alcoholism, when compared to lower ranking staff nurses and nursing attendants. However, these higher-ranking nurses also had the least contact with alcoholic patients, so it is unclear whether it was their superior knowledge, their lack of direct contact, or a combination of these two factors that was responsible for their more positive attitudes. Poikolainen (1988) found that knowledge was negatively correlated with the tendency to endorse compulsory alcoholism treatment, but this correlation was only found in the group of clerical employees in this study, not in the physician and nurse groups. Ding et al. (2005) found a positive correlation between HIV knowledge and attitudes toward HIV positive intravenous drug users. In a study of GPs and various professionals working in psychiatry and addictions services, van Boekel et al. (2014) found that familiarity with substance use problems was associated with positive regard toward substance using patients.
One study found a negative correlation between knowledge and attitudes. Gassman (1997) found that social work graduate students who had the most knowledge about alcoholism were also the most likely to have moralistic attitudes about alcoholism; they were more likely to endorse alcoholism as a wrongdoing and to see its treatment as beyond the skills of a social worker.

Michaud et al. (1992) did not find a direct correlation between knowledge and attitudes, but they did find a positive correlation between participants’ level of uncertainty in their knowledge and their self-reported ignorance and uncomfortableness in working with alcoholics.

Caplehorn, Irwig, Saunders, and Chir (1996) found that employees at methadone maintenance clinics who were more knowledgeable about the benefits of indefinite methadone maintenance therapy (MMT) were no more likely to approve of indefinite MMT, and no less likely to endorse the expulsion of patients from the program due to illicit drug use or time, than were employees who were less knowledgeable. Surprisingly, most subjects in this study were found to be quite knowledgeable about the benefits of MMT, and it was, in fact, their own personal punitive beliefs about substance use that predicted the likelihood that they would endorse expelling a patient from the program after a set amount of time, or after the patient used an illicit opiate. The authors concluded that providing further education to employees would not be an effective means of improving their therapeutic attitudes. However, in a study published the following year, Caplehorn et al. (1997) did find that knowledge about MMT treatment was negatively correlated with disapproval of drug use, and with the likelihood of endorsing patients’ expulsion from the MMT program.

Summary. This section looked at factors related to addictions training, including education and training, specialization, and knowledge. Overall, education and training appear to
have a positive impact on attitudes; unfortunately, training in the addictions field appears to be lacking for those who do not specialize in the area, and this may be one of the main problems related to the poor attitudes often seen in the literature. Specialization has also consistently been shown to predict positive attitudes, but there is little evidence to suggest that specialists are fundamentally different from any other professionals, aside from their higher levels of education and training, the higher amount of role support found in their jobs, the higher frequency with which they interact with clients with SUDs, and the lower number of situational constraints that they face in the workplace. Although education, training, and experience all lead to knowledge, there is not enough convincing evidence to support the existence of a solid relationship between knowledge and attitudes. For the purposes of the current study, we decided to collect information on education and training because the literature consistently found these factors to be important predictors of attitudes. Regarding knowledge, the literature does not suggest that it is an important factor to look at as a possible predictor of attitudes and, as such, items related to knowledge were not included in the current study.

**Personal Variables.** Several personal variables were investigated for their relation to attitudes.

**Personal Use.** Personal drug and alcohol use habits were investigated as possible factors that influence attitudes, with mixed results. In a literature review comprising studies on healthcare professionals, it was found that attitudes regarding illicit drugs were coloured more by personal drug and alcohol use habits than by social and health related issues. If a professional reported the use of a specific drug, they would also be more likely to have tolerant attitudes toward the use of that drug, and more likely to endorse its legalization (McLaughlin and Long,
Robinson et al. (1993) found that personal substance use was positively correlated with positive attitudes toward substance use. The relationship between personal use and attitudes was not always found to be positive and clear-cut, however. Richmond and Foster (2003) found that regular alcohol users were more permissive in their attitudes towards substance use than non-users or occasional users, but also that non-users of cannabis, non-smokers, and non-illicit drug users had more optimistic views about addiction treatment interventions than users of cannabis, regular smokers, and occasional illicit drug users, respectively. McLellan, Hery, and Druley (1978) found that hospital staff who drank a low to moderate amount of alcohol were more likely to have positive and therapeutic attitudes, while those who were abstinent or heavy drinkers were more likely to have punitive and negative attitudes toward alcoholic patients. Crothers and Dorrian (2011) found comparable results in a group of nurses; those who reported consuming more than one drink per week had a greater desire to work with alcoholics, while those who reported having more than two drinks, on average, per drinking occasion, were more pessimistic toward working with alcoholics. Gassman (1997) found that social workers who consumed the most alcohol were the most likely to see alcoholism as a habit and to reject the disease model, while those who consumed the least alcohol were the most optimistic about treatment. Perhaps those who use heavily and do not become addicted cannot relate or empathize very well to their clients who do, or perhaps they feel like addiction is too close to home and thus become defensive in their attitudes in an attempt to separate themselves psychologically from their addicted clients.

There was also one study that found no connection between personal substance use habits and attitudes. In a study of professionals working in psychiatry and professionals working in
addiction services, personal drinking habits were found to have no effect on attitudes towards substance-using patients (van Boekel et al., 2014).

**Personal Addiction History.** Several studies looked at the effect of a personal history of addiction on attitudes. Humphreys et al. (1996) found no major differences between the attitudes of staff at inpatient substance abuse treatment centres who were in recovery and staff who had never had an SUD. They did find that staff who were in recovery were more likely to endorse an eclectic approach to treatment. LoSciuto et al. (1984) found that counsellors in recovery were more optimistic about clients remaining abstinent after treatment compared to non-ex-addict counsellors, and that non-ex-addict counsellors were more pessimistic regarding counselling treatment outcomes. Nurco et al. (1987) found that ex-addict staff were less likely to blame external factors for addictions when compared to non-ex-addict staff. In a study of anaesthesiologists, May et al. (2002) found that a personal history of addiction was predictive of positive attitudes toward addicted patients. Caplehorn et al. (1997) found that staff at a methadone clinic who had previous personal experience with methadone maintenance were less likely to endorse the expulsion of patients due to illicit opiate use or after being in treatment for over a year, whereas staff who had a history of addiction without methadone maintenance were more likely to endorse this expulsion. It is possible that some professionals may find it easier to empathize with addicted clients, having experienced addiction themselves, but it is also possible that they may not be able to relate to clients who have a harder time escaping their addiction or who do not respond to the same treatments in the same way that the professional once did.

Russell et al. (2011), in a study of addiction treatment providers, found that having a personal history of addiction was associated with a belief in the disease model of addiction; however, it is unclear whether or not this belief reflects a positive attitude. Davis et al. (2010)
found that being in recovery was associated with adherence to the medical model of addiction; they also found that it was associated with being less likely to adhere to the moral model of addiction, and consequently, with more positive attitudes.

**Personal Experience with Someone with Substance Abuse Issues.** Another commonly considered variable was the presence or absence of an experience with a close person (e.g., a family member, friend, co-worker, or intimate partner) who struggled with substance use. Most studies found that these personal experiences had a positive effect on attitudes. Koch et al. (2006) found that counsellor trainees who had had an experience with someone close to them having an SUD were more likely to adhere to the medical and natural models of recovery, and less likely to adhere to the moral model. Davis et al. (2010) found that college students enrolled in rehabilitation courses who had a family member in recovery were more likely to adhere to the medical model, and less likely to adhere to the moral model, than students who did not. Several studies found higher levels of treatment optimism among nursing faculty members, counselling trainees, and social workers, respectively, who had a personal experience with a family member in addiction or recovery (Ducote, 1992; Gassman, 1997; Macleod, 2015). Stein (2003) found that social work students who had previously known or currently knew someone with a substance use issue had more positive attitudes toward substance abuse. May et al. (2002) found that having an experience with an addicted friend, relative, or colleague, and attendance at a 12-step group were predictive of more positive attitudes. Ferneau (1967) also found more positive attitudes among nurses after attendance at an Alcoholics Anonymous meeting; although this did not involve an experience with a close person, it did involve personal experience with substance users outside of an academic or professional context. Selleck and Redding (1998) found that nurses who had
personal or familial experiences with substance use were more likely to have positive attitudes toward their substance using patients.

Despite most studies finding a positive correlation between firsthand experiences with substance users and attitudes, Miller and Frances (1986) found that only 20.6% of psychiatrists in their survey listed family or personal experience as a contributing factor to their interest in working in the substance abuse field. Saitz et al. (2002) found that interpersonal experience with addicted persons outside of a professional context was not associated with the attitudes, practices, or professional satisfaction of primary care physicians and residents in the context of working with substance-using patients. In a study of social workers, no relationship was found between firsthand experiences with alcoholism and attitudes toward it (Giannetti et al., 2002).

**Authoritarianism.** Authoritarianism was investigated in several studies as a possible factor that affects attitudes. Mendelson et al. (1964) found that physicians’ authoritarian attitudes were correlated with custodial, rather than humanistic, attitudes toward alcoholic patients. Moody (1971) also found a positive correlation between authoritarianism and custodial attitudes, in a group of nursing students. Chodorkoff (1969) found contradictory results in a study that compared nurses to doctors; the nurses were found to have more positive attitudes than the doctors, but they were also found to be more authoritarian.

**Personal values.** Personal values have also been investigated as a possible factor that influences attitudes. Skinner et al. (2007) found that attribution of responsibility for heroin use, but not alcohol use, was associated with having conservative values. Skinner et al. (2007) found that conservative values were associated with high negative affect, but not with low positive affect, toward alcohol dependent and heroin dependent patients. Skinner et al. (2007) also measured values of self-transcendence; these values were associated with a belief in universalism
and benevolence and were defined as being the opposite of conservative values. Higher positive affect was predicted by higher values of self-transcendence, but lower negative affect was not. Although this study did not show a direct effect of value systems on attitudes, it does make logical sense that the two would be related. Conservatism, by definition, favours tradition over change, and traditional attitudes toward substance use are moralistic in nature; identifying as a conservative would therefore make one more likely to hold onto these traditional moralistic values and less likely to embrace the contemporary shift toward tolerance and humanism.

Brener et al. (2010) found that physicians and nurses who were more conservative had more negative perceptions of intravenous drug users (IDUs), but only in the domain of perceived controllability of their disorder. This study also found that participants who rated IDUs as high in controllability were more likely to attribute patients’ other ailments to intravenous drug use.

**Negative affect.** Negative affect was another variable measured that was found to be related to attitudes. For example, van Boekel et al. (2014) measured psychiatry and addictions professionals’ levels of anger, fear, and pity toward substance users and found that anger and fear were associated with more negative attitudes, while pity was not. The authors chose to look at these emotions because of previous studies that investigated the stigma attached to mental illness; these studies found that emotional reactions evoked by patients can play a role in determining attitudes and judgments. The three most salient emotional reactions found in these studies were fear, anger, and pity (Angermeyer, Holzinger, & Matschinger, 2010; Angermeyer and Matschinger, 2003; Corrigan, 2000). The van Boekel et al. (2014) study appears to be the first and only study that has investigated the relationship between negative affect and attitudes toward substance users.
Summary. This section looked at the various personal variables that have been investigated as possible predictors of attitudes. Personal use, as one would expect, has generally been found to be associated with more tolerant and permissive attitudes toward substance use. However, several studies showed that heavier users may be more likely to have negative attitudes toward addicted persons. It would be interesting to look at this variable with counsellors and counselling trainees in the current study to see if these findings are supported. Personal addiction history appears to be related to attitudes, but there is currently no consensus in the literature as to how; collecting data on this topic in the current study would help to clarify this relationship for counsellors and counselling students. Having an experience with a close person with substance use issues was consistently found to be related to positive attitudes in the literature. These findings, as well as the inclusion of this variable in recent studies with counselling trainees, suggest that it would be valuable to include an item related to these experiences in the current study. Studies that looked at authoritarianism were conducted over 40 years ago on medical professionals and there is no evidence to suggest that this factor might be relevant to counsellors; as such, inclusion of this factor in the current study does not seem justified. Personal values appear to be related indirectly to attitudes, according to the literature. More specifically, conservatism has been shown to be related to high negative affect as well as higher perceived controllability of SUDs, and other values, such as the humanistic values related to self-transcendence, have been found to be related to high positive affect. For the purposes of the current study, given the indirect relationship of these variables to attitudes, there does not seem to be sufficient evidence to investigate it further in the proposed study. Finally, negative affect associated with substance users has recently come up as a potentially important predictor
of attitudes; given the lack of research on this variable with counsellors and the importance of affect to the counselling relationship, we chose to investigate this factor in the current study.

**Beliefs.** Although beliefs can be seen as an aspect of attitudes, especially through the lens of the multidimensional theory of attitudes, the literature has historically treated beliefs as separate from attitudes and the effect of beliefs on attitudes has been consistently investigated.

**Etiology.** Many studies asked participants about their beliefs regarding the causes of SUDs. The reasoning behind including these types of questions is clear; one could argue that etiological beliefs about addiction not only inform attitudes toward addiction but, in fact, represent a key aspect of the attitudes themselves. For example, a person who believes that addiction is the result of a morally bankrupt individual making clear-headed and informed decisions that are hedonistic, selfish, and risky, will most likely view the addicted individual in a negative light. On the other hand, a person who understands the physiological mechanism behind addiction, in which powerful substances essentially hijack and rewire reward circuits in the brain and sees addiction as a maladaptive coping technique for dealing with social isolation, existential crises, and latent childhood trauma, will most likely be more empathic toward addicted individuals. Unfortunately, beliefs about etiology and the mechanism by which these beliefs inform attitudes are much more complex and subtle than what I just described. Although beliefs may form a basis for the development of attitudes, the relationship between specific etiological beliefs and the development of positive therapeutic attitudes toward substance-using clients is by no means straightforward.

When discussing the effect of etiological beliefs on attitudes, it may be more useful to look at the beliefs about the addicted person that underlie the specific models, rather than to look at the models themselves. For instance, some of the beliefs that may underlie the disease model
are: the person is sick, the person is in need of medical care, and the person is suffering because of physical changes within their brain. Some of the beliefs that underlie the psychological model may be: the person has developed maladaptive coping techniques to deal with emotional pain, the person is experiencing difficulties in their close relationships, and the person has low self-esteem. On the more negative side, some of the beliefs that underlie the moral model may be: the person is morally bankrupt, the person is weak-willed, the person is selfish, and the person purposefully makes bad decisions while knowingly harming themselves and others. Keeping this in mind, I will now present the research findings related to etiological beliefs and attitudes.

Some early research was conducted under the assumption that a belief in the disease model of addiction equated to a positive attitude. These studies also looked at the disease model as the antithesis to the moral model, assuming that belief in one precluded belief in the other. One reason for this assumption may be the lack of control often associated with the term disease; if a person is not to be blamed for their addiction, then a more positive attitude toward them should follow. However, several studies found that a belief in addiction as a disease does not necessarily equate with zero attribution of responsibility (Biener, 1983; Kahle & White, 1991; Vargas, 2011).

Although belief in the disease model does not necessarily equate to a positive attitude, some studies did find support for a link between belief in the disease model and positive attitudes. For example, Sterne and Pittman (1965) found that psychiatric staff who viewed alcoholism as an illness were less pessimistic toward the prospect of recovery than those participants who adhered to the moral model. A study by Soverow et al. (1972) also found a connection between treatment optimism and belief in the disease model; methadone clinic staff were more likely than patients to endorse the disease model of addiction and to be optimistic.
about recovery prognosis. Estes and Gurel (1979) also found a positive association between belief in the disease model and positive attitudes toward alcoholics. In the group of nursing students in their study, it was found that being accepting of alcoholics was associated with believing that alcoholics are not weak-willed, that they can be helped, and that alcoholism is a disease.

A connection between the disease model and positive attitudes was also found among counsellors. Hart (1975/76) looked at the attitudes of six rehabilitation counsellors and found a general acceptance of the disease concept of alcoholism, as well as a tendency to view clients in a positive and therapeutic light. Ferneau and Paine (1972) found that paraprofessional alcoholism counsellor trainees endorsed the disease model and did not endorse questionnaire items that described alcoholics as being from low socioeconomic status and as being weak-willed.

Belief in the importance of genetics as a causative factor in the development of addiction is a belief that is consistent with the disease model. Van and Gabrynowicz (1977) found that physicians who cited genetics as one of the causative factors of alcohol dependence had more positive attitudes than nurses, who did not.

A connection between rejection of the disease model and negative attitudes was also found in some early studies, lending some additional support for the connection between the two variables. Knox (1969) looked at the attitudes of Veteran’s Affairs (VA) staff psychologists and found that most did not endorse the disease model of alcoholism, were not willing to spend time with alcoholics, and endorsed a poor prognosis for continued post-treatment abstinence. Knox (1971) later found comparable results in a group of VA psychologists and psychiatrists; participants rejected the disease model, were pessimistic toward the prognosis of alcoholism treatment, and were reluctant to work with alcoholics. Participants in this study preferred to
define alcoholism as a behaviour problem, symptom complex, or escape mechanism. Poldrugo et al. (1986) found that Italian students believed less in the physical-genetic etiology of alcoholism when compared to American students and were more likely than both American and Australian students to endorse that alcoholics have a weak moral character. Engs (1982) found that medical, nursing, and pharmacy students believed less in the physical-genetic etiology of alcoholism and held more negative attitudes toward alcoholics than a norm group made up of students from various other majors.

Rejection of the disease model was not always found to be associated with negative attitudes, however. For example, Lemos and Moran (1978) found that psychologists tended to disagree with the idea that alcoholism is an illness but, in contrast to the Knox (1969, 1971) studies above, the psychologists in this study had relatively positive and therapeutic attitudes toward alcoholics.

Another important finding in the literature regarding the disease model of addiction is that belief in the model does not preclude belief in other models, including models that are associated with negative and moralistic attitudes. For example, Engs (1982) found that first year students endorsed both the physical-genetic and moral weakness models of addiction more than final year students did, demonstrating that simultaneous endorsement of these two seemingly contradictory models is indeed possible. Wechsler and Rohman’s (1982) findings also show that belief in the disease model does not preclude agreement with other models. Most of the students in this study supported the disease model, but many of these same students also endorsed emotional problems and character weaknesses as causes of alcoholism. Interestingly, counselling students were the least likely to endorse the disease model in this study and, along with physicians, were the most pessimistic toward the prognosis of medical treatment for alcoholism.
Kahle and White’s (1991) study of psychiatrists and counsellors also found that a belief in the disease model did not preclude harbouring moralistic attitudes toward addicted clients; many of their participants endorsed the disease concept of alcoholism, while also agreeing that they would feel uncomfortable being around alcoholics a lot and that alcoholics are responsible for their disease.

Rosenbaum (1977) also found moralistic beliefs among a group of nurses who adhered to the disease model. Although most of the nurses in their study believed in the disease model of alcoholism and were optimistic about treatment, only 15% of respondents reported being non-moralistic in their views of alcoholics. Nurses in this study endorsed excessive dependence, marital problems, and anxiety as the most likely causes of alcoholism. Vargas (2011) found similar results with nursing students in Brazil; despite 84% of participants agreeing with the disease model of alcoholism, attitudes toward alcoholics among the students were fairly negative overall. Gassman (1997) also found a small subgroup of social work students who endorsed alcoholism as both a disease and a wrongdoing, although the majority of students in this study who endorsed the disease model did not, on average, have discernable positions on moralism and treatment optimism.

Belief in the psychological etiology of addiction was also shown to be associated with positive attitudes. For example, Sullivan and Hale (1987) looked at the etiological beliefs of nurses regarding alcoholism and found a correlation between these beliefs and the treatment that the nurses were likely to endorse. Participants who endorsed a psychological etiology were more likely to endorse humanitarian treatment, while those who endorsed a physical-genetic etiology were more likely to endorse medical treatment, and those who endorsed the moral weakness etiology were more likely to endorse the social rejection of alcoholics. Engs (1982) also found
evidence to support a connection between belief in the psychological etiology of addiction and positive attitudes. This study found that medical and pharmacy students believed less in the psychological etiology of alcoholism and had more negative attitudes toward alcoholism than a norm group of students.

Not all studies that investigated etiological beliefs found a connection between these beliefs and attitudes. For example, LoSciuto et al. (1984) found that drug counsellors viewed peer pressure as the most important factor in the development of addiction, and poverty and discrimination as the least important factors, but they did not find a link between these beliefs and attitudes.

Although etiological beliefs have been shown at times to be related to attitudes toward substance-using clients, the literature has failed to show any consistent patterns or relationships between these two variables. Etiological beliefs are very much tied to particular time periods and professional philosophies and have changed significantly over time alongside attitudes, which have recently become more positive. The only model of addiction that has been shown to be related to attitudes with a high degree of certainty is the moral model; its very definition implies the presence of moralistic judgements, which in turn reflect negative attitudes. The disease model was once assumed to equate to positive attitudes, but this has since been disproved in many studies. The bio-psycho-social-spiritual model of addiction is one of the more popular modern models in use today in various healthcare settings; it provides a theoretical framework for holistic and humanistic treatments that recognize the multifaceted nature of addiction and the diversity of the substance-using population. This model and its accompanying treatment philosophies appear to be consistent with more tolerant, positive attitudes toward substance
users; however, a thorough review of the literature yielded no studies that investigated the relationship between attitudes and the bio-psycho-social-spiritual model of addiction.

**Causal attributions.** Beliefs about the causal role a client plays in the development and course of their addiction have been shown to be important to attitudes. For example, in studies of the general population, attributions of responsibility for mental illness and addiction to the suffering individual were found to be associated with negative attitudes (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003; Schomerus et al., 2011). Similar results were found with healthcare professionals regarding their addicted patients (Brener et al., 2010; van Boekel et al., 2014). However, one study found that high attribution of responsibility did not preclude having positive attitudes (Skinner et al., 2007). Like attribution of responsibility, perceived controllability has also been shown to be related to negative attitudes in the general population (Corrigan et al., 2003; Schomerus et al., 2011; Weiner et al., 1988) and in healthcare professionals (Brener et al., 2010).

**Summary.** This section looked at the effect of etiological and causal attribution beliefs on attitudes. No specific model was found to be consistently associated with more positive attitudes, although the psychological model was shown at times to be associated with more humanistic attitudes and the disease model with more medical attitudes. The moral model, by definition, is associated with more negative and judgemental attitudes toward addicted persons. The beliefs about addicted persons underlying these models are important; more specifically, attribution of responsibility and perceived controllability have both been examined and found to be associated with more negative attitudes. Differences in these beliefs may be the reason why we see both positive and negative attitudes associated with the disease model of addiction. Etiological beliefs have been shown to have an inconsistent effect on attitudes throughout the literature, so we did
not include them as factors in the current study. However, causal attribution beliefs seemed to be a more promising factor to investigate and, as such, these beliefs were included as factors in the current study.

**Demographic Factors.** Demographic factors such as age, race, sex, geography, and culture were sometimes found to be related to attitudes. As a disclaimer to this section, it should be noted that measuring the effect of variables such as race and sex can be problematic for several reasons. For one, race is a social construct that has, for the most part, been debunked as being a biological objective reality. About 85% of the genetic variation between human individuals is seen within our socially constructed races, while only 15% is seen between them (Lewontin, 1972). Race is also confounded with many factors such as socioeconomic status, oppression, culture, and privilege. Sex is also a problematic construct to measure as it does not take into account the multitude of gender identities acknowledged today, and it is also confounded with a number of other factors, such as culture, oppression, and privilege. Keeping this in mind, I will now report the findings in the literature related to demographic factors.

**Age.** Age was generally found to be negatively correlated with positive attitudes and positively correlated with negative attitudes toward substance users (Abed & Neira-Munoz, 1990; Carroll, 1996; Davies & Huxley, 1997; Heinemann & Rhodes, 1967; Howard & Chung, 2000; Lincoln et al., 1973; May et al., 2002). The studies that reported this finding did not distinguish between ‘younger’ and ‘older’ participants; they simply found that a person’s numerical age correlated negatively with attitudes. Several studies, however, did not find that age had any significant effect on attitudes (Lemos & Moran, 1978; Muldoon, 1998; Richmond & Foster, 2003; Sullivan & Hale, 1987; Tolor & Tamerin, 1975). One study suggested that age may be positively correlated with certain attitudes, namely, belief in alcoholism as a disease,
controllability, and treatment optimism. Leigh and Gerrish (1986) found that younger volunteer therapist aides were less likely to consider alcoholism as an illness when compared to older volunteers. This study also found that, after their volunteer experience, younger volunteers became more likely to believe that alcoholics can control their drinking, while older volunteers became more optimistic about treatment prognosis. Russell et al. (2011) also found that belief in the disease model of addiction was associated with being older. Crothers and Dorrian (2011) found that older nurses were more likely to endorse alcoholism as an illness and less likely to endorse a pessimistic attitude toward its treatment.

**Sex.** There was some evidence in the literature that sex has an influence on etiological beliefs, but no consensus has been found. Leigh and Gerrish (1986) found that female volunteer therapist aides were less likely to consider alcoholism an illness, when compared to their male counterparts. Sullivan and Hale (1987) found contradictory results; in their study, female nurses were more likely to endorse a physical-genetic cause of alcoholism and to endorse medical treatment than were male nurses.

Several studies found attitude differences based on sex. Abed and Neira-Munoz (1990) found that male GPs had more positive attitudes toward drug addiction and its treatment than their female counterparts. Carroll (1995) also found that men had more positive attitudes than women, in this case toward intravenous drug users, among a group of nurses. May et al. (2002) found that male anesthesiologists were more permissive toward substance use than their female counterpart. Other studies showed more positive attitudes among women. Foster and Onyeukwu (2003) found that female forensic nurses had less moralistic attitudes toward substance abuse than male forensic nurses. Ding et al. (2005) found that physicians’ attitudes toward HIV positive intravenous drug using patients were negatively correlated with being male. Sex was
also found to have no effect on attitudes in a number of studies (Hunot & Rosenbach, 1998; Lemos & Moran, 1978; Muldoon, 1998; Richmond & Foster, 2003; Tolor & Tamerin, 1975).

**Race.** Race was sometimes found to be related to attitudes. Nurco et al. (1987) found that White staff at a drug treatment centre had more permissive attitudes toward addicts and illicit drug use, were less optimistic toward treatment prognosis, were more likely to endorse that addicts avoid responsibility, and were more likely to view society and outside sources as responsible for addiction, as compared to Black staff. In this study, there was a fairly even split between Whites and non-Whites in both the staff and client groups, so it is unlikely that issues related to racial prejudice and stereotyping had a significant effect on the overall data. Foster and Onyeukwu (2003) found that Black nurses were more optimistic about treatment outcomes than were non-Black nurses. At the time of the study, over half of the patients in the unit were Black and just under a quarter were White. As for the study participants, 50% were Black, 17% were White, 20% were South Asian, and the remaining 13% were of other backgrounds. Given that the patients were predominantly Black, it could be possible that the non-Black nurses had more negative attitudes due to racial prejudice and stereotyping. Muldoon (1998) also conducted a study that looked at race as a variable; he found that race had no effect on the attitudes of a group of master’s school counselling students.

**Geography and Culture.** Geography and, by association, culture were two other factors that emerged as potentially important predictors of attitudes in the literature. Kilty (1975) compared the attitudes of professionals, community residents, and graduate students, and found that the community in which the person resided, worked, or studied was the most important predictor of attitudes when compared to participant group, sex, age, and educational
achievement. Despite being more educated and having more experience, the professionals in this study reflected the attitudes and biases of the community in which they worked.

Bush and Williams (1988) looked at the attitudes of rural generalist and urban generalist and specialist health and welfare workers. They found more positive attitudes in the urban professionals overall, but when training, experience, and role support were controlled for, no differences were found.

Poldrugo et al. (1986) compared the attitudes of American, Australian, and Italian students enrolled in programs either in teaching or the health professions. Compared to American students, Italian students believed less in the physical-genetic etiology of alcoholism, but more in treating alcoholism as a medical illness. Italians were the most likely group to endorse that alcoholics have a weak moral character. Italian student teachers believed the most in the social avoidance of alcoholics and in the inherited nature of alcoholism. The authors noted that in Italy, heavy and consistent drinking is not generally perceived as a problem, and thus the average Italian likely associates the term alcoholic with a more extreme and externally obvious version of alcoholism than the average American or Australian would. This cultural difference in the definition of alcoholism may have been responsible for the more negative attitudes found among the Italian students. It should be noted that, although this study did find an attitudinal difference that was most likely culturally based, it did not include culture as a distinct variable in the study.

Russell et al. (2011) found that addiction treatment providers in the U.S.A. were more likely to endorse the disease model of addiction than those working in the U.K., who were more likely to endorse the choice model, or to endorse addiction as a way of coping with life. It is unclear which of these beliefs reflects the most positive attitude.
Rivers et al. (1986) compared the attitudes of mental health service providers from the U.S.A. and New Zealand. They found that Americans attributed more blame, endorsed a more severe societal response, and rated deviants as more dangerous than New Zealanders.

Gilchrist et al. (2011) compared the attitudes of healthcare professionals from a number of European countries and found that regard for drug using patients was considerably lower in nations that had joined the European Union (EU) more recently (Bulgaria, Poland, Slovakia, and Slovenia) when compared to countries that had been part of the EU for a longer time (Greece, Italy, Scotland, and Spain).

**Summary.** The demographic factors of age, sex, race, geography, and culture were investigated in many past studies. The demographic factor that related to attitudes most consistently was age; with this variable, a negative correlation was found more often than a positive one. Sex was also found to be related to attitudes in a number of studies, but no consistent directional relationship was found. Significant geographical differences in attitudes were also found in the research. Although culture was not looked at specifically as a variable, it is likely that much of the variability seen between geographical regions can be attributed to the cultural differences found between different geographical areas. Perhaps if the studies described above had controlled for cultural identity, their findings would have been significantly different.

For the purposes of the current study, in order to best describe the sample, I collected general demographic information. Given that age and sex were shown to have a relationship in many past studies, we decided to use these variables in our analyses. However, given that the variable of sex assumes a gender binary, we changed this variable to gender identity, to allow for all participants to accurately report this variable. Regarding geography and culture, previous studies found differences in attitudes when comparing participants from different countries; as
the current study included only Canadian participants, we did not include this factor in our analyses. Race was also not included in our analyses because of the reasons mentioned in the disclaimer above, as well as the fact that most contemporary studies have also not included this variable, presumably because it is no longer deemed relevant to the topic.

**Overall Summary.** This section explored the numerous factors that have been looked at as possible predictors of attitudes toward substance use and clients with substance use issues in the existing literature; the most important and promising factors were highlighted and their appropriateness for use in the current study was discussed. The work-related factors of setting, experience, role support, situational constraints, confidence, and occupational contact were all consistently found to be related to attitudes in one way or another, therefore justifying their use in the current study. Addictions education and training were found by most studies to be very important predictors of attitudes; they were also found to be lacking in many participant groups. Collection of this data therefore also seemed appropriate. Specialization was consistently found to be related to positive attitudes, but this may just be an artifact of the effect of other factors that accompany specialization; data on education and training was sufficient to determine participants’ level of specialization, so no additional items related to this factor were included in the study’s questionnaire. Knowledge was not consistently found to be a key factor, so it was not included in the current study. Regarding personal variables, personal alcohol and drug use, addiction history, and experience with a close person with an addiction all seem to be salient factors and were therefore included in the current study. Data were also collected on negative affect, as it looked like a promising factor. The same goes for causative attribution beliefs about addiction. Finally, a basic demographics section was included in the study’s questionnaire to
attain basic descriptive information about the sample, as well as to investigate the relationship between attitudes and age and gender.
Chapter 3: Manuscript

Introduction

Substance Use Disorders (SUDs) are a significant social, economic, and humanitarian problem in Canada and across the globe. In Canada alone, 1.5 million people, or 4.4% of the population met the criteria for an SUD within the past year (Statistics Canada, 2013) and many of these people do not seek help for their disorder. One study found that only 14.7% of Americans living with an SUD sought treatment within the past year (Grella, Karno, Warda, Moore, & Niv, 2009). Research has shown that one major barrier to seeking treatment for a mental health issue is anticipated stigmatization and fear of negative responses from healthcare professionals such as general practitioners, psychiatrists, psychologists, and counsellors (Barney, Griffiths, Jorm, & Christensen, 2006; Schomerus & Angermeyer, 2008). This fear is not unfounded, as many studies have shown that healthcare professionals have more negative attitudes towards patients with SUDs than they do towards patients with other mental illnesses or physical disabilities (e.g., Christison, Haviland, & Riggs, 2002), or towards patients with intellectual disabilities (e.g., Boyle et al., 2010). These negative attitudes hinder the development of the therapeutic relationship (Palmer, Murphy, Piselli, & Ball, 2009), increase rates of treatment dropout and relapse (Brener, von Hippel, Kippax, & Preacher, 2010), and decrease rates of treatment success (Luoma et al., 2007).

Counselling has been shown to be an effective treatment for SUDs as compared to waitlist and no-treatment control groups (Burke, Arkowitz, & Menchola, 2003; Dutra et al., 2008; McCrady & Ziedonis, 2001). Although practitioners’ attitudes are important in every discipline, attitudes towards one’s clients are of particular importance in the field of counselling because they are integral in the formation of the therapeutic relationship (Rogers, 1957) which is
an essential component of any type of counselling or psychotherapy (Gaston, 1990), as well as a significant predictor of treatment outcomes (Gaston, 1990; Martin, Garske, & Davis, 2000). Despite this importance, there have been relatively few studies conducted on counsellors’ attitudes towards clients with SUDs.

Over the last 47 years, only 25 studies have been conducted that examined counsellors’ attitudes towards clients with SUDs and most of these studies did not focus exclusively on counsellors. Counsellors’ attitudes were found to be generally positive (Ball et al., 2002; Broadus, Hartje, Roget, Cahoon, & Clinkinbeard, 2010; Carroll, 1993; Dunston-Mclee, 2001; Kahle & White, 1991; Rodgers-Bonaccorsy, 2010) as well as more positive than other social and healthcare professionals (Carroll, 1993). Nonetheless, a minority of counsellors in some of these studies did report having stigmatizing and stereotypical views towards clients with SUDs (Kahle & White, 1991; West & Miller, 1999). However, given the recent changes in the social and political landscape of substance use, such as the legalization of cannabis, the mounting opioid crisis, and a more open discussion in the general public about mental health and addiction, it is likely that counsellors’ attitudes may have shifted within the last five years. Unfortunately, more than half of the studies on counsellors’ attitudes were conducted before 2000 and only two were conducted within the last five years. It is therefore possible that much of the extant research no longer represents the current attitudes of counsellors, thus highlighting the need for more contemporary research, such as the current study.

In addition to understanding counsellors’ current attitudes towards working with clients with SUDs, it is also important to identify important predictors of these attitudes. Research on the attitudes of counsellors, counselling trainees, and other health professionals has suggested that SUD education and training (Balich et al., 2015; Caplehorn, Hartel, & Irwig, 1997; Davis,
Sneed, & Koch, 2010; Dunston-Mclee, 2001; Forman, Bovasso, & Woody, 2001; Macleod, 2015; Muldoon, 1998; West & Miller, 1999), experience working with clients with SUDs (Caplehorn et al., 1992; Forman et al., 2001), frequent contact with clients with SUDs (Dunston-Mclee, 2001; van Boekel et al., 2014), working in a specialized SUD clinic (Gilchrist et al., 2011; van Boekel et al., 2014), having confidence in clinical skills and treatment effectiveness (van Boekel et al., 2014; Van Kampen, 2010), having had an SUD oneself (Caplehorn et al., 1997; Davis et al., 2010; LoSciuto et al., 1984), and having had an experience with a close person with an SUD (Davis et al., 2010, Koch et al., 2006) are positively correlated with positive attitudes. In addition, Rodgers-Bonnacorsy (2010) found a positive effect of role support on counsellors’ attitudes. Role support, as defined by Cartwright (1980), refers to the perceived availability of colleagues in the workplace who can help to clarify professional responsibilities and assist with specific client-related issues or personal difficulties encountered while on the job.

Still other variables have been found to have a negative effect on attitudes. For example, negative emotions, such as fear and anger were found to be associated with more negative attitudes towards clients with SUDs (van Boekel et al., 2014). Albery et al. (2003) found that, amongst a sample of non-specialist drug workers (including volunteer counsellors), the development of positive attitudes was hindered when situational constraints were above a certain level. Situational constraints were defined as work-related factors such as patient load, stress, time pressure, organizational issues, and problems with morale in the workplace. Attribution beliefs have also been studied in relation to attitudes towards clients with SUDs; attributing responsibility to the client for their addiction was found to be associated with more negative attitudes amongst psychologists but perceiving the client as in control of their disorder did not have a significant effect (van Boekel et al., 2014). A study of doctors and nurses, however, did
find that perceived controllability of SUDs had a negative effect on attitudes (Brener, von Hippel, Kippax, & Preacher, 2010). Finally, one study that included counsellors looked at the effect of age on attitudes and found a negative correlation (Carroll, 1996).

The personal substance use habits of professionals have also been investigated as possible predictors of attitudes. Results from these studies were mixed; one study that included psychologists found that heavy drinkers reported being more permissive towards drug use but also that participants who did not use illicit drugs had more positive attitudes towards SUD treatment outcomes (Richmond & Foster, 2003). Another study that included psychologists found no relationship between alcohol consumption habits and attitudes toward clients with SUDs (van Boekel et al., 2014).

Despite the growing problem of SUDs and the importance of practitioners’ attitudes for working with such a stigmatized group, there has yet to be a study that focuses specifically on the attitudes of counsellors towards clients with SUDs and a wide array of potential predictors of these attitudes. The current study was designed to address this startling gap in the research. In this study, we measured counsellors’ attitudes towards working with clients with SUDs and towards working with clients with another commonly encountered disorder (i.e., major depressive disorder). We expected to find generally positive attitudes towards working with both groups of clients, but also hypothesized that we would find counsellors’ attitudes towards working with clients with SUDs to be significantly more negative. We also examined a wide array of variables that have been identified in the literature as potentially contributing to practitioners’ attitudes towards clients. Our intention was to determine not only which variables

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4 For the purposes of the current study, those individuals who were considered counsellors were not defined by their professional title, but by the act of practicing counselling or psychotherapy. Although most of our participants had a master’s degree in counselling psychology, our sample also included individuals from a variety of professional designations, such as social workers, clinical psychologists, and counselling psychologists.
were significantly related to counsellors’ attitudes towards working with clients with SUDs, but also which variables significantly explained counsellors’ attitudes in the presence of the other variables.

**Methods**

**Participants and Recruitment.** Using a convenience sample, we aimed to recruit 200 participants from across Canada to complete the survey, including participants from counsellor training programs and counsellors already working in the community as general counsellors or substance use counsellors. Counselling students were allowed to participate provided they were currently seeing clients in the community. Recruitment was conducted primarily via e-mail invitation. Administrators of counselling clinics, health authorities, professional organizations, and non-profit organizations were asked to circulate the survey amongst their employees and members, respectively (see Appendix A for a list of contacted organizations). Counselling training programs from across Canada were contacted via email and asked to distribute the survey amongst their students who were currently seeing clients in the field. A list of masters-level programs in counselling and their respective contact email addresses was obtained from the Canadian Counselling and Psychotherapy Association website (http://ccpa-acccp.ca/students/graduate-programs/canadian-graduate-programs). We also sent individual and personalized e-mails to potential participants by retrieving their e-mail addresses from publicly available online counsellor databases (http://counsellingbc.com/counsellors; http://terida.com/idms/directory/directory.seam; http://psychologytoday.com/ca/therapists). To encourage participation of counsellors from both urban and rural areas across Canada, we made use of local counsellor directories from all the major regions of the country. While our use of a convenience sample meant there was no way to guarantee the inclusion of minority groups in the
sample, there were not any specific barriers to the participation of minority groups in the study that I was aware of.

**Procedure.** Data were collected using an online survey made available via Fluidsurveys. The survey took approximately 20 minutes to complete; participants had the option to be entered into a draw to win one of ten $10 Starbucks gift cards as an incentive to participate.

**Measures.** The following measures were used in the survey to collect data on counsellors’ attitudes as well as variables that might predict or explain these attitudes. The survey was divided into the following sections: Work Setting Questionnaire (3 items), Work Experiences – Situational Constraints (16 items), Medical Conditions Regard Scale – Substance Use Disorders (11 items), Attribution Beliefs (2 items), Emotional Reactions (5 items), Drug and Drug Problems Perceptions Questionnaire (DDPPQ) – Role Adequacy (7 items), DDPPQ – Role Support (3 items), Personal Exposure to and Experience with SUDs (6 items), Substance Use Information (5 items), Medical Conditions Regard Scale – Major Depressive Disorder (11 items), and Demographics (11 items).

**Work Setting Questionnaire.** In this questionnaire, participants were asked whether or not they currently worked in a clinic that specializes in the treatment of clients with SUDs (with the response options of “yes,” “no,” and “prefer not to answer”) and, if they did, how long they had worked in this setting (in years and months). A third item, modified from van Boekel et al. (2014) asked “how often do you work with clients with substance use disorders?”; response options were “never or almost never”, “a few times a year,” “monthly,” “weekly,” “daily,” and “prefer not to answer”.

**Work Experiences: Situational Constraints.** Situational constraints were measured using a modified version of the Drug Problems Occupationally Perceived Questionnaire (DPOPQ;
Albery et al., 2003). The original scale consisted of 18 items; we removed three items (4, 15, and 17) that were either ambiguous or seemingly unrelated to situational constraints and added one item (“At my workplace, SUDs are never the focus of treatment”). Several items were modified to make them clearer, more applicable to counsellors, or to emphasize situational constraints rather than intrapersonal conflict. In addition, the terms “drug-related problems,” “drug problem” or “drug-dependant” were replaced with the term “SUD”, the term “drug use” was replaced with “substance use,” and the term “problem drug users” was replaced with “clients”. Participants indicated their agreement with items using a modified 7-point response scale (1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = neither agree nor disagree, 5 = slightly agree, 6 = moderately agree, 7 = strongly agree) as well as the option “prefer not to answer”. This response format was also used in other survey sections. To deal with missing data, we used case mean replacement. Participants with no more than three missing DPOPQ items had their missing data replaced with the mean of their individual DPOPQ item scores. Items 1, 2, 10, 11, and 14 were reverse-scored and then individual item scores were summed to create a total situational constraints score. Scores could range from 16 to 112. Lower scores indicated lower levels of situational constraints. In the present study, a Cronbach’s alpha estimate of .83 was obtained.

**Medical Conditions Regard Scale.** The MCRS measures attitudes towards working with specific hypothetical patients/clients. In this study, the participants completed the scale with regard to a client with a “Substance Use Disorder” (MCRS-SUD) as well as with regard to a client with “Major Depressive Disorder” (MCRS-MDD) (later on in the questionnaire) in order to compare regard scores toward SUDs and another commonly seen mental health issue. We used a modified version of this 11-item measure. It is important to note that the scale was not
designed for use with counsellors; thus, we replaced the word “patients” with “clients” and the phrase “patients like this” with “these clients”. The item “I wouldn’t mind getting up on call nights to care for patients like this” was changed to “I wouldn’t mind answering an emergency phone call or email from these clients outside of my regular work hours”, the item “treating patients like this is a waste of medical dollars” was changed to “treating these clients is a waste of money”, and the item “I prefer not to work with patients like this” was changed to “I prefer to not work with these clients” to make it less awkward to read. We used a slightly modified 6-point Likert-type response format (1 = strongly disagree, 2 = moderately disagree, 3 = not sure but probably disagree, 4 = not sure but probably agree, 5 = moderately agree, and 6 = strongly agree). We also added the option “prefer not to answer” to each item.

After data collection, we observed that item 10 (“Insurance providers should cover these clients to the same degree that they cover clients with other conditions”) had a considerable number of missing responses (MCRS-SUD: n = 25; MCRS-MDD: n = 17). This raised concerns for us about the applicability of the item across different regions; for example, if a participant lived in a region where counselling was not covered by insurance providers, this item would not be relevant to them and they would therefore not respond to it. Thus, we made the decision to remove this item. After performing a factor analysis on the data from the MCRS-SUD and MCRS-MDD, we discovered that all the items loaded onto a single factor except for item 7 (“I wouldn’t mind answering an emergency phone call or email from these clients outside of my regular work hours”). This raised issues for us about the appropriateness of the item for this scale; it could be argued that this question does not tap into attitudes towards working with specific client groups but taps into participants’ standards of professional practice and boundary setting. Thus, we decided to remove item 7 from our final analysis. To deal with missing data,
we used case mean replacement. Participants with no more than two missing MCRS items had their missing data replaced with the mean of their individual MCRS item scores. Items 1, 2, 4, 9, and 11 were reverse-scored and then the remaining 9 individual item scores were summed to create a total score, which ranged from 9 (lowest regard) to 54 (highest regard). In the present study, Cronbach’s alpha estimates of .83 and .80 were obtained for the MCRS – SUD and the MCRS – MDD, respectively.

We performed an exploratory factor analysis of the polychoric matrix using principal axis factoring as the extraction method for each of the 9-item MCRS-SUD and the MCRS-MDD. For the MCRS-SUD, the KMO was .84 and the Bartlett’s Test of Sphericity was statistically significant ($\chi^2(36) = 974.13$, $p<.001$). A one factor solution was supported, explaining 43.7% of variance. The factor loadings ranged from .58 to .81. For the MCRS-MDD, the KMO was .82 and the Bartlett’s Test of Sphericity was statistically significant ($\chi^2(36) = 981.35$, $p<.001$). A one factor solution was supported, explaining 42.6% of variance. The factor loadings ranged from .40 to .77. These results supported the use of total scores for each of the MCRS-SUD and the MCRS-MDD in the study.

**Attribution Beliefs.** This section included two items from van Boekel et al. (2014) regarding beliefs about addicted persons’ causative roles in their own addictions: (1) Someone with an SUD is in control of their disorder, and (2) Someone with an SUD is responsible for their disorder. The response format was changed from a 5-point scale to a 7-point scale ($1 = strongly disagree$, $2 = moderately disagree$, $3 = slightly disagree$, $4 = neither agree nor disagree$, $5 = slightly agree$, $6 = moderately agree$, $7 = strongly agree$) to maintain consistency with other survey items as well as to obtain more precise data. These items were treated as individual variables, as they were in the van Boekel et al. (2014) study.
**Emotional Reactions Questionnaire.** This section was comprised of five items related to emotional reactions (specifically negative affect) toward clients with SUDs. Items 1, 2 and 3 (afraid, sorry\(^5\), angry) were based on van Boekel et al. (2014) whereas items 2 (disgusted), and 5 (sad) were added to enrich the data. The wording of the first three items was changed to maintain consistency among the five items. The instructions and response options were changed to refer to people with SUDs instead of addictions and from degree of agreement with the statements to how frequently one felt the emotions toward people with SUDs (i.e., 1 = *never or almost never*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*, 5 = *always or almost always*). Respondents could also choose “prefer not to answer”. The five items were treated as individual variables, as they were in the van Boekel et al. (2014) study.

**DDPPQ – Role Adequacy.** A modified version of the 7-item Role Adequacy subscale of the DDPPQ (items 1 through 7 in the Watson, Maclaren, & Kerr (2006) DDPPQ) was used to measure role adequacy or what we think is best described as ‘confidence’. Participants were asked about their perceived levels of knowledge regarding substance use and substance use treatment and if they perceived this knowledge to be sufficient to carry out their jobs effectively. We replaced the term “drugs and drug related problems” and “drug problems” with “SUDs”, the term “drug users” with “clients with SUDs”, the term “drug use” with “substance use”, the phrase “my patients/clients” with “my clients with SUDs”, and the term “drugs” with “substances”. Participants rated their agreement with the items on a 7-point response scale (1 = *strongly disagree*, 2 = *moderately disagree*, 3 = *slightly disagree*, 4 = *neither agree nor disagree*, 5 = *slightly agree*, 6 = *moderately agree*, 7 = *strongly agree*), although they could also choose ‘prefer not to answer’. We reversed the direction of responses (i.e., from *strongly agree* to

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\(^5\) This item was mistranslated from a copy of the original Dutch survey used in van Boekel et al. (2014). The item was supposed to have been “pity,” but instead was translated by Google Translate into English as “sorry.”
strongly disagree) so that higher scores would correspond with higher levels of confidence. Individual item scores were summed to obtain a total confidence score, ranging from 7 (lowest confidence) to 49 (highest confidence). In the current study, a Cronbach’s alpha estimate of .95 was obtained.

**DDPPQ - Role Support.** The 3-item Role Support subscale (items 12, 13, and 14) from the DDPPQ (Watson et al., 2006) was used to collect information on the perceived availability of colleagues who can help to clarify professional responsibilities and assist with specific client-related issues or personal difficulties encountered in the workplace. As with the Role Adequacy section above, we replaced the term “drug user(s)” with “client with an SUD” and used the same 7-point response scale. Individual item scores were summed to obtain a total role support score, ranging from 3 (lowest role support) to 21 (highest role support). In the current study, a Cronbach’s alpha estimate of .91 was obtained.

**Personal Exposure to and Experience with SUDs.** This section was composed of six yes or no questions that asked if the participant had currently or previously known a co-worker, family member, friend, or intimate partner with an SUD, and two questions that asked if the participant had currently or previously had (a) an SUD or (b) a behavioural addiction (e.g. an addiction to gambling, sex, internet, or food). The behavioural addiction item was included to avoid grouping together participants who had experienced legitimate addictions (albeit not substance addictions) with participants who had never experienced an addiction at all. This questionnaire was created for the current study. All items were treated as separate variables.

**Substance Use Information.** Participants were asked about their current and past recreational use of five main groups of substances: alcohol, cannabis and cannabis products (e.g., marijuana, hashish, edibles), psychedelics (e.g., LSD, magic mushrooms, mescaline),
“party/rave” drugs (e.g., MDMA, GHB, ketamine), and “hard” drugs (e.g., cocaine, crack, heroin, prescription stimulants/opioids, methamphetamine). There were three response options: “never,” “within my lifetime,” and “within the past month.” The five items were treated as separate variables. This questionnaire was created for the current study given the lack of any standardized measures used in previous research. Alcohol and cannabis were each given their own category; the former has been considered legal and socially acceptable for many years and the latter, although not fully legalized, is becoming more socially acceptable and pervasive in modern society. Psychedelic drugs were given their own category because of their low dependence and addiction liabilities and because of the recent resurgence of psychiatric research focused on the potential therapeutic value of these drugs. “Party” and “rave” drugs were given their own category due to their low to medium dependence and addiction liabilities, their prevalence in modern youth culture, and their use in current research as novel medications for common psychiatric conditions (e.g. MDMA assisted psychotherapy as a treatment for post-traumatic stress disorder and ketamine as a treatment for major depression). Finally, “hard” drugs were grouped together based on their high dependence and addiction liabilities as well as the high levels of social stigma normally associated with these drugs.

Demographics. The demographics section asked for the participant’s age, gender identity (female, male, transsexual, transgender, genderqueer, two-spirit, female-to-male, male-to-female, intersex, unsure, questioning, other – please specify, prefer not to answer), primary ethnic/cultural heritage or ancestry/background (Aboriginal Peoples, East Asian, European, Hispanic/Latino, Middle Eastern, South Asian, Mixed heritage, other – please specify), and highest level of education (0-8 years of schooling, some high school – no diploma, high school diploma or G.E.D., some college/university – no degree, college/university diploma – no degree,
bachelor’s degree, some graduate/professional studies – no degree, graduate/professional studies received degree – please specify, other – please specify, prefer not to answer).

Items were also included about the type of setting(s) in which the participant currently saw clients (community non-profit agency, health authority clinic, other publicly funded clinic, private practice, private for-profit clinic, elementary or secondary school, postsecondary institution, other – please specify, prefer not to answer), the name of the counselling program the participant had completed to date (e.g. Master of Arts – Counselling Psychology, Doctor of Philosophy – Social Work), current enrollment in a counselling training program and the name of this program, and current enrollment in a substance use specific education or training program (yes, no, or prefer not to answer).

This section also asked about previous experience working with clients with SUDs and previous SUD-related education. The experience item asked, “how many hours total have you spent working with clients who have SUDs?” and had seven response options (0 hours; 1-50 hours; 51-200 hours; 201-500 hours; 501-2000 hours; 2001-3000 hours; over 3000 hours). The education item asked, “how many hours of education on SUDs have you received?” and had five response options (0 hours, 1-4 hours, 5-9 hours, 10-40 hours, more than 40 hours). Both items also included a “prefer not to answer” option.

We also added one unique item to this questionnaire related to the type of education received (“During this SUD education, which of the following educational activities were used by the instructor?”), as certain studies suggested that education that involves reflective activities (e.g., keeping a reflective journal, group discussions on stigma/biases, opportunities for self-reflection; Balich et al., 2015), practical exercises (e.g., giving up an unhealthy habit for a set amount of time, agreeing to abstain from a negative behaviour, and/or adding a positive
behaviour to your daily routine for a set amount of time; Balich et al., 2015), and direct client contact (e.g., working with substance addicted clients; attending an Alcoholics or Narcotics Anonymous meeting; May et al., 2002) may be more influential on attitudes than strictly lecture-based education. Participants indicated which of these educational interventions they had participated in. The other response options were “none,” “not applicable,” and “prefer not to answer.”

**Ethics.** Confidentiality was the biggest ethical concern in this study, as sensitive information (e.g., about participants’ experiences using alcohol and illicit drugs) was collected. However, given the anonymous nature of the survey, the risks to confidentiality were significantly mitigated. All digital data were stored securely on an encrypted data stick kept in a locked drawer. In order to obtain informed consent from the participants, a questionnaire cover sheet containing key information about the study was prepared and participants were informed that by completing and submitting the questionnaire they were giving their consent to participate in the study.

Another potential ethical issue involved dual relationships, as some of the participants in the study were friends and colleagues in the field. To ameliorate this issue, we were careful to not coerce these individuals into participating in the study. Participation in the study was completely voluntary. Potential participants were recruited via e-mail to lessen the pressure that would have been inherent in a face-to-face interaction. As the survey was anonymous and participation occurred via an online survey, we would not have known if any friends or acquaintances had participated or not, thus further reducing any social pressure they might have felt to participate.
Finally, because the survey included items related to the substance use of participants and the close people in their lives, we offered a list of substance use resources for participants who were interested.

**Data Analysis.** Data were analyzed using SPSS. The mean, standard deviation, and distribution (skew, kurtosis, and presence of outliers) were examined for each variable. Demographic information for the sample was described using means and standard deviations or frequency (as appropriate). To answer the first research question, counsellors’ attitudes toward working with hypothetical clients with (a) substance use disorder (MCRS-SUD scores), and (b) major depressive disorder (MCRS-MDD scores) were compared using a one-way repeated-measures analysis of variance (ANOVA) and effect sizes.

To answer the second research question, one-way between groups ANOVAs, as well as Pearson and Spearman-rho correlation coefficients, were used to examine the differences on or bivariate relationships between, respectively, MCRS-SUD scores (the DV) and scores on the following IVs: working in an SUD clinic, time spent working in an SUD clinic, situational constraints, attribution beliefs, emotional reactions, confidence, role support, personal exposure to and experience with SUDs, substance use information, and age. Variables that were found to have statistically significant (p < .05) differences on, or relationships with, the MCRS-SUD scores were included in a standard ordinary least squares multiple linear regression to determine which variables significantly predicted MCRS-SUD scores while in the presence of the other variables showing bivariate significance.

**Results**

**Participants.** Overall, 266 participants completed the survey. Of these participants, three had to be removed from the dataset because they had more than two missing responses from the
key DV measure (MCRS-SUD), leaving a final total of 263 participants. Only 1.18% of the data (28 out of 2367 responses) on this measure was missing, which is an acceptable percentage of missing responses to use case mean replacement to fill in missing values. Participants ranged in age from 24 to 75 years, with a mean age of 45.9 years (SD=12.4). The majority of participants identified as female (n=200; 76.0%); other gender identities reported were male (n=57; 21.7%), genderqueer (n=4; 1.5%), and questioning (n=1; 0.4%). One participant did not report gender identity.

**Education.** The vast majority of the sample reported having a master’s degree (n=205; 77.9%); of this group, most had a degree in counselling psychology, clinical counselling, or counselling (n=138). The next largest groups were social work (n = 16), clinical psychology (n=10), psychology (n=7), and marriage & family therapy (n=4), but there was a wide range of other specific areas reported as well (e.g., art therapy, communication disorders, educational counselling or psychology, family relations and human development, industrial/organization psychology, mental health, pastoral counselling, psychotherapy, school psychology, sports psychology, health psychology, expressive arts and psychotherapy, psychotherapy and spiritual care). In 11 cases, the field was not specified.

A smaller section of the sample reported having a doctorate degree (n=28; 10.6%); of this group, the most common degree was a Ph.D. in clinical psychology (n=8), followed by a Ph.D. in counselling psychology (n=7). There were several other Ph.D. specialties reported, including interdisciplinary studies, psychology, psychology and human development, psychotherapy, and social work. Six participants did not specify the field of their Ph.D. Two other doctorate-level degrees were reported: A Doctor of Education in psychology and a Doctor of Ministry.
Far fewer participants reported having just a bachelor’s degree (n=15; 5.7%); the most common specialty was social work (n=6); several other specialties were also reported, including health studies, psychiatric nursing, psychology, and spiritual psychology. Five participants did not specify what their bachelor’s degree was in. Other participants reported their highest level of education as a post-graduate certificate (n=6; 2.4%); these certificates were reported to be in addictions (n=4) and gestalt psychotherapy (n=2).

Three participants reported being in a graduate program; one of these participants was enrolled in a master’s level counselling program, while the other two did not specify their programs. Three participants reported having a college/university diploma: one in counselling and applied psychology, one in addictions intervention, and one not specified. One participant reported having a degree in marriage and family therapy at an unspecified level and one participant reported a degree in occupational therapy, also at an unspecified level.

Regarding training in SUDs, almost half of participants reported having more than 40 hours of such training (n=123; 46.8%); 28.5% (n=75) participants reported having between 10-40 hours, 9.1% (n=24) had 5-9 hours, and 5.3% (n=14) had 1-4 hours of SUD training. A small number of participants reported having had no SUD training (n=16; 6.1%), while 11 participants did not respond to this item.

**Ethnicity.** A large majority of the sample reported having European heritage (n=209; 79.5%); the next most commonly reported ethnicity was mixed heritage (n=16; 6.1%), followed by Middle Eastern (n=6; 2.3%), South Asian (n=6; 2.3%), Jewish/Semitic (n=5; 1.9%), East Asian (n=4; 1.5%), Caribbean (n=3; 1.1%), Hispanic/Latino (n=2; 0.8%), and Aboriginal Peoples (n=1; 0.4%). Two participants reported “other” as their ethnicity but did not specify their heritage, while nine participants were missing data for this item.
Work Setting and Experience. Participants reported seeing clients in a variety of different settings including private practice (n=171; 65.0%), community non-profit agencies (n=66; 25.1%), health authority clinics (n=38; 14.4%), post-secondary institutions (n=16; 6.1%), elementary and secondary schools (14; 5.3%), other publicly funded clinics (n=7; 2.7%), employee assistance programs (n=7; 2.7%), hospitals (n=7; 2.7%), and residential drug and alcohol treatment centres (n=2; 0.8%). Other settings, each reported by only one participant, included a drug and alcohol withdrawal management centre, a health authority outreach team, a family health team, victim services, a government psychiatric facility, a hospice, underemployment support services for persons with a disability, and a jail remand centre. Many participants reported working in more than one setting (n=81; 30.8%); of these participants, the majority worked in private practice (n=72).

The majority of participants did not work in clinics that specialized in SUD treatment (n=181; 68.8%), although a significant number did report working in such clinics (n=79; 30.0%); three participants did not provide a response to this item. Seventy-six out of the 79 participants who reported working in a specialized SUD clinic also reported how long they had been working in the clinic; years of employment ranged from one month to 30 years, with a mean period of 7.6 years (SD=7.96 years). Participants reported working with clients with SUDs daily (n=66; 25.1%), weekly (n=84; 31.9%), monthly (n=36; 13.7%), or a few times a year (n=53; 20.2%); only a small number of participants reported never or almost never working with this population (n=24; 9.1%).

Participants also reported the total number of hours they had worked with clients with SUDs. Almost a quarter of participants reported having worked over 3000 hours with this population (n=62; 23.6%); the next most common range of hours reported was 1-50 hours (n=47;
17.9%), followed by 51-200 hours (n=46; 17.5%), 501-2000 hours (n=42; 16.0%), 201-500 hours (n=34; 12.9%), 2001-3000 hours (n=15; 5.7%), and zero hours (n=4; 1.5%). Thirteen participants did not provide a response to this item.

**Counsellors’ Attitudes Towards Clients.** To answer the first research question, a one-way repeated measures ANOVA was conducted to compare the total scores on the MCRS when the respondent completed it while thinking about clients with SUDs (i.e., MCRS-SUD) versus thinking about clients with MDD (i.e., MCRS-MDD). There was a small significant difference between the two sets of scale total scores, Wilks’ Lambda = .981, F (1, 262) = 5.03, p = .026, partial eta squared = .02. In other words, counsellors were shown to have slightly more positive attitudes towards working with clients with MDD (M = 44.16, SD = 6.67) than they had towards working with clients with SUDs (M = 43.13, SD = 7.51).

One-way repeated measures ANOVAs were also conducted to compare the mean scores of the nine corresponding individual items on the MCRS-SUD and MCRS-MDD to see where the primary differences lie. As can be seen in Table 3.1 below, the means were found to be significantly different for items 7, 8, and 9; for each of these items, attitudes towards working with clients with MDD were found to be more positive.

Table 3.1

*Mean Performance on MCRS-SUDs and MCRS-MDD*

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean MCRS-SUD Item Score</th>
<th>Mean MCRS-MDD Item Score</th>
<th>Wilks’ Lambda</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>1. I prefer to not work with these clients</em></td>
<td>4.81 (SD = 1.51)</td>
<td>4.91 (SD = 1.49)</td>
<td>F (1, 262) = .81, p = .369</td>
<td>.003</td>
</tr>
<tr>
<td><em>2. These clients irritate me</em></td>
<td>5.27 (SD = 1.10)</td>
<td>5.19 (SD =1.14)</td>
<td>F (1, 262) = 1.09, p = .298</td>
<td>.004</td>
</tr>
<tr>
<td>Item</td>
<td>Mean MCRS-SUD Item Score</td>
<td>Mean MCRS-MDD Item Score</td>
<td>Wilks’ Lambda</td>
<td>Partial Eta Squared</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>--------------------------</td>
<td>--------------------------</td>
<td>---------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>3. I enjoy giving extra time to these clients</td>
<td>3.98 (SD = 1.52)</td>
<td>3.89 (SD = 1.49)</td>
<td>$F (1, 262) = .93, \ p = .335$</td>
<td>.004</td>
</tr>
<tr>
<td>*4. These clients are particularly difficult for me to work with</td>
<td>4.14 (SD = 1.57)</td>
<td>4.35 (SD = 1.55)</td>
<td>$F (1, 262) = 3.06, \ p = .082$</td>
<td>.012</td>
</tr>
<tr>
<td>5. Working with these clients is satisfying</td>
<td>4.74 (SD = 1.19)</td>
<td>4.75 (SD = 1.15)</td>
<td>$F (1, 262) = 0.002, \ p = .964$</td>
<td>.000</td>
</tr>
<tr>
<td>6. I feel especially compassionate toward these clients</td>
<td>4.84 (SD = 1.29)</td>
<td>4.86 (SD = 1.22)</td>
<td>$F (1, 262) = 0.02, \ p = .888$</td>
<td>.000</td>
</tr>
<tr>
<td>7. I can usually find something that helps these clients feel better</td>
<td>4.65 (SD = 1.20)</td>
<td>5.06 (SD = .91)</td>
<td>$F (1, 262) = 28.70, \ p &lt; .0001$</td>
<td>.10 (moderate effect size)</td>
</tr>
<tr>
<td>*8. There is little I can do to help these clients</td>
<td>4.91 (SD =1.21)</td>
<td>5.22 (SD = 1.01)</td>
<td>$F (1, 262) = 17.07, \ p &lt; .0001$</td>
<td>.06 (moderate effect size)</td>
</tr>
<tr>
<td>*9. Treating these clients is a waste of money</td>
<td>5.78 (SD = .80)</td>
<td>5.93 (SD = .30)</td>
<td>$F (1, 262) = 11.42, \ p &lt; .001$</td>
<td>.04 (small effect size)</td>
</tr>
</tbody>
</table>

*Note.* An asterisk (*) is used to indicate items that have been reverse-coded. Significant results are in bold. MCRS-SUD and MCRS-MDD item scores range from 1 to 6, with higher scores indicating a more positive attitude. MCRS = Medical Condition Regard Scale, SUD = Substance Use Disorder, MDD = Major Depressive Disorder, SD = Standard Deviation.

Although MCRS-MDD scores were significantly higher than MCRS-SUD scores, participants’ attitudes towards working with clients with SUDs were still found to be positive overall; most counsellors (n=252) obtained MCRS-SUD scores over 27, the midpoint of the
scale. Only 11 participants had MCRS-SUD scores of 27 or lower, representing negative attitudes.

**Correlates of Counsellors’ Attitudes.** To determine the correlates of counsellors’ attitudes towards working with clients with SUDs, a number of analyses were conducted, using ANOVA and bivariate correlation coefficients. After determining the variables that resulted in statistically significant differences in, or relationships with, MCRS scores, a standard ordinary least squares multiple regression was run with these variables, to determine which variables still had an effect in the presence of the other statistically significant variables.

**Education and Experience.**

**Hours of SUD training.** A one-way between-groups ANOVA was conducted to explore the impact of the number of hours of training on SUDs that a counsellor had received: Group 1 = 0-9 hours (n = 54); Group 2 = 10-40 hours (n = 75); Group 3 = > 40 hours (n=123) on their attitudes towards working with clients with SUDs, as measured by the MCRS-SUD. The data violated the assumption of homogeneity of variances, as determined by Levene’s test ($p = .014$) and, as such, a Welch variance weighted ANOVA was conducted. There was a statistically significant difference in MCRS-SUD scores for the three groups: $F(2, 117.81) = 30.12, p < .0001$. The effect size, calculated using adjusted omega squared, was medium ($\omega^2 = .07$). Post-hoc comparisons using the Games-Howell test showed significant differences ($p \leq .001$) among all three hours of SUD training groups on the MCRS-SUD: 0-9 hours: $M = 37.26, SD = 8.10$; 10-40 hours: $M = 42.29, SD = 6.80$; > 40 hours = $M = 46.27, SD = 5.86$.

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6 The original item in the survey contained 5 groups (0 hrs, 1-4 hrs, 5-9 hrs, 10-40 hrs, > 40 hrs). The decision was made to reduce the number of groups to 3 by combining the first three groups because the sample sizes for these groups were quite small (n = 16, 14, 24, respectively).
**Educational interventions.** A one-way between groups ANOVA was conducted to explore the impact of three educational interventions (reflective activities, direct client contact, practical exercises) as well as various combinations of those interventions, on participants’ MCRS-SUD scores. Participants were divided into three groups reflecting which interventions (and roughly extent of interventions) they had participated in: Group 1 = None (n=59); Group 2 = Reflective Only, Practical Only, Contact Only, or Reflective + Practical (n=95); Group 3 = Reflective + Contact, Contact + Practical, or Reflective + Contact + Practical (n=109). Given that the data violated the assumption of homogeneity of variances, as determined by Levene’s test ($p < .0001$), a Welch variance weighted ANOVA was conducted. The results showed a statistically significant difference in MCRS scores among the three groups: $F (2, 133.32) = 15.75, p < .0001$. The effect size, calculated using adjusted omega squared, was small ($\omega^2 = .04$). Post-hoc comparisons using the Games-Howell test showed significant differences ($p \leq .001$) among only two of the three educational intervention groups on the MCRS-SUD: (a) Group 1 (none): $M = 39.20$, $SD = 9.11$ vs. Group 3 (Reflective + Contact, Contact + Practical, or Reflective + Contact + Practical): $M = 45.83$, $SD = 5.79$ and (b) Group 2 (Reflective Only, Practical Only, Contact Only; or Reflective + Practical): $M = 42.48$, $SD = 6.99$ vs. Group 3 (Reflective + Contact, Contact + Practical, or Reflective + Contact + Practical). MCRS-SUD scores were not significantly different between Groups 1 and 2.

**Previous experience with SUD clients.** A one-way between-groups ANOVA was conducted to explore the difference in MCRS-SUD scores between participants based on their previous experience working with clients with SUDs. Participants were divided into three
groups: Group 1 = 0-50 hours (n=51); Group 2 = 51-3000 hours (n=137); Group 3 = > 3000 hours (n=62). The data violated the assumption of homogeneity of variances, as determined by Levene’s test (p = .038), so a Welch variance weighted ANOVA was conducted. A statistically significant difference in MCRS-SUD scores was found for the three groups: $F (2, 114.96) = 37.85, p < .0001$. The effect size, calculated using adjusted omega squared, was medium ($\omega^2 = .09$). Post-hoc comparisons using the Games-Howell test showed significant differences ($p < .0001$) among all three hours of experience with clients with SUDs groups on the MCRS-SUD: 0-50 hours: $M = 37.06, SD = 7.89$; 51-3000 hours: $M = 43.37, SD = 6.80$; > 3000 hours = $M = 47.89, SD = 5.11$.

**Work-related factors.**

**Frequency of working with SUD population.** A one-way between-groups ANOVA was conducted to explore the impact of the frequency with which a counsellor works with clients with SUDs on MCRS-SUD scores. Participants were divided into three groups based on the frequency with which they reported working with clients with SUDs (Group 1: Never or Almost Never (n=24); Group 2: A Few Times a Year to Monthly (n=89); Group 3: Weekly to Daily (n=150). There was a large statistical significance in MCRS scores for the three groups: $F (2, 260) = 53.19, p < .0001$, eta squared = .29. Post-hoc comparisons using the Games-Howell test showed significant differences ($p < .0001$) among all three frequency of work with the SUD

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8 The original item in the survey contained seven groups (0 hrs, 1-50 hrs, 51-200 hrs, 201-500 hrs, 501-2000 hrs, 2001-3000 hrs, >3000 hrs). We decided to reduce this to three groups by combining groups 1 and 2 and groups 3, 4, 5, and 6 because some of the sample sizes were quite small (n = 4, 47, 46, 34, 42, and 15, respectively).

9 Participants were originally divided into 5 groups (Never or Almost Never, A Few Times a Year, Monthly, Weekly, Daily) but we decided to reduce this number to 3 by combining some of the groups to help simplify our analyses.
population groups on the MCRS-SUD: Never or Almost Never: M = 33.67, SD = 7.58; A Few Times a Year to Monthly: M = 40.40, SD = 7.00; Weekly to Daily = M = 46.27, SD = 5.70.

**SUD clinic employment.** A one-way between-groups ANOVA was conducted to explore the impact of working in a specialized SUD clinic (n=79) vs. not (n=181) on MCRS-SUD scores. Given that the data violated the assumption of homogeneity of variances, as determined by Levene’s test ($p < .0001$), a Welch variance weighted ANOVA was conducted. The Welch ANOVA showed the two groups differed statistically significantly: $F (1, 220.70) = 51.88, p < .0001$. The effect size, calculated using adjusted omega squared, was large ($\omega^2 = .16$). The mean MCRS-SUD scores of the participants who worked in a specialized SUD clinic (M = 47.13, SD = 5.02) were 5.8 points higher than the mean of the participants who did not work in such a clinic (M = 41.33, SD = 7.73).

**Correlations.** The remaining work-related factors were investigated using Pearson product-moment correlation coefficients. Preliminary analyses were performed to ensure no violation of the assumptions of linearity. Results from these analyses are presented in Table 3.2.

<table>
<thead>
<tr>
<th>Variable</th>
<th>r value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time worked in SUD Clinic (in months) (n=76)</td>
<td>.045</td>
<td>.700</td>
</tr>
<tr>
<td>Role Adequacy (DDPPQ Subscale) (n=262)</td>
<td>.536 (large)</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Role Support (DDPPQ Subscale) (n=263)</td>
<td>.208 (small)</td>
<td>.001</td>
</tr>
<tr>
<td>Situational Constraints (DPOPQ) (n=261)</td>
<td>-.635 (large)</td>
<td>&lt; .0001</td>
</tr>
</tbody>
</table>
Note: Significant results are in bold. MCRS = Medical Condition Regard Scale, SUD = Substance Use Disorder, DDPPQ = Drug and Drug Problems Perceptions Questionnaire, DPOPQ = Drug Problems Occupationally Perceived Questionnaire.

**Personal factors.**

**Substance use.** A series of separate one-way between-groups ANOVAs were conducted to explore the impact of participants’ use of different substances on their MCRS-SUD scores. Participants were divided into three groups based on the most recent time they had used the substance: Group 1 = Never (n_alcohol=19; n_cannabis=71; n_psychedelics=157; n_party/rave=213; n_hard=211); Group 2 = Within My Lifetime (n_alcohol=76; n_cannabis=157; n_psychedelics=99; n_party/rave=45; n_hard=50); Group 3 = Within the Past Month (n_alcohol=167; n_cannabis=34; n_psychedelics=6; n_party/rave=4; n_hard=0).

No statistically significant differences were found among the three groups for alcohol \(F(2, 259) = 2.26, p = .11\), cannabis \(F(2, 259) = .09, p = .91\), psychedelics \(F(2, 259) = .11, p = .89\), party/rave drugs \(F(2, 259) = 3.01, p = .05\), or hard drugs \(F(1, 259) = .10, p = .76\).

**Personal experience with SUDs.** A series of separate one-way between-groups ANOVAs were conducted to explore the impact of participants’ firsthand experiences with addiction on their MCRS-SUD scores. These results are presented in Table 3.3.

Table 3.3

**Differences on the MCRS-SUD by Personal Experiences with SUDs**

<table>
<thead>
<tr>
<th>Experience</th>
<th>Group</th>
<th>Descriptives</th>
<th>ANOVA</th>
<th>Eta squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-worker</td>
<td>No (n=146)</td>
<td>M = 41.70, SD = 7.64</td>
<td>(F(1, 261) = 12.51, p &lt; .0001)</td>
<td>.05 (small effect size)</td>
</tr>
<tr>
<td></td>
<td>Yes (n=117)</td>
<td>M = 44.92, SD = 6.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Member</td>
<td>No (n=80)</td>
<td>M = 41.19, SD = 7.75</td>
<td></td>
<td>.03</td>
</tr>
<tr>
<td>Experience</td>
<td>Group</td>
<td>Descriptives</td>
<td>ANOVA</td>
<td>Eta squared</td>
</tr>
<tr>
<td>------------</td>
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<td>-----------------------</td>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>Yes (n=183)</td>
<td>M = 43.98, SD = 7.25</td>
<td>$F (1, 261) = 7.93, p = .005$</td>
<td>(small effect size)</td>
</tr>
<tr>
<td>Friend</td>
<td>No (n=88)</td>
<td>M = 41.09, SD = 7.98</td>
<td>$F (1, 261) = 10.13, p = .002$</td>
<td>.03 (small effect size)</td>
</tr>
<tr>
<td></td>
<td>Yes (n=175)</td>
<td>M = 44.16, SD = 7.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intimate</td>
<td>No (n=173)</td>
<td>M = 42.95, SD = 7.17</td>
<td>$F (1, 261) = .288, p = .592$</td>
<td>.01</td>
</tr>
<tr>
<td>Partner</td>
<td>Yes (n=90)</td>
<td>M = 43.48, SD = 8.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>No (n=226)</td>
<td>M = 42.79, SD = 7.44</td>
<td>$F (1, 261) = 3.35, p = .069$</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>Yes (n=37)</td>
<td>M = 45.22, SD = 7.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>No (n=204)</td>
<td>M = 42.98, SD = 7.76</td>
<td>$F (1, 261) = .40, p = .528$</td>
<td>.002</td>
</tr>
<tr>
<td>Behavioural</td>
<td>Yes (n=59)</td>
<td>M = 43.68, SD = 6.61</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Significant results are also in bold. M = Mean, SD = Standard Deviation.

**Emotional reactions.** The relationship between experiencing negative affect towards people who have SUDs and MCRS-SUD scores was investigated using Spearman Rho correlation coefficients. The frequency of feeling afraid of ($r_s = -.342, p < .0001$), angry towards ($r_s = -.287, p < .0001$), or disgusted by ($r_s = -.273, p < .0001$) clients with SUDs was significantly and negatively related to MCRS-SUD scores. The frequency of feeling sorry for ($r_s = -.026, n.s.$) or sad about ($r_s = -.036, n.s.$) clients with SUDs was not significantly related to MCRS-SUD scores.

**Attribution beliefs.** The relationship between MCRS-SUD scores and each of the beliefs that a person with an SUD is in control of their disorder and the belief that a person with an SUD is responsible for their disorder was investigated using Spearman Rho correlation coefficient. No significant correlation was found between MCRS-SUD scores and control ($r_s = .018, p = .777$),
but a small negative correlation was found between MCRS-SUD scores and responsibility ($r_s = - .139, p < .05$).

**Age.** The relationship between participants’ age and their MCRS-SUD scores was investigated using a Pearson correlation. Preliminary analyses were performed to ensure no violation of the assumptions of linearity. There was a small, statistically significant negative correlation between the two variables ($r = - .137, p < .05$).

**Gender.** A one-way between groups ANOVA was conducted to determine if there were any male/female gender differences in MCRS scores. No significant difference was found: $F (1, 255) = .01, p = .91$.

**Predictors of Counsellors’ Attitudes Towards Clients With SUDs.** An ordinary least squares multiple regression was performed using the following variables that were found to have significant differences on, or bivariate relationships with, MCRS-SUD scores: hours of SUD training, educational interventions, previous SUD client experience, frequency of work with clients with SUDs, SUD clinic employment, confidence (as measured by the modified DDPPQ Role Adequacy Subscale), role support (as measured by the modified DDPPQ Role Support Subscale), situational constraints (as measured by the modified DPOPQ), personal experience with SUDs (co-worker, family member, and friend), emotional reactions (afraid, angry, disgusted), attribution beliefs (responsibility), and age. The results of this regression are reported in Table 3.4. The assumptions of normality, linearity, and homoscedasticity were found to be met. The model did not exhibit signs of multicollinearity (variance inflation factors (VIFs) = 1.09-3.08).10 After controlling for other variables, only frequency of working with SUD clients – weekly to daily (as compared with reference group “Never or Almost Never”) ($B = 4.17, p <

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10 VIF of >10 indicates multicollinearity (Hair, Anderson, Tatham, & Black, 1995)
.05), situational constraints ($B = -1.77, p < .0001$), emotional reactions – angry ($B = -1.39, p < .01$), and age ($B = -0.06, p < .05$) remained as significant predictors of counsellors’ attitudes towards working with clients with SUDs. The model predicted about half of the variance in MCRS-SUD scores: $F (20, 219) = 12.28, p < .0001, R^2 = .53, R^2_{adj} = .49$.

Table 3.4

Predictors of Counsellors’ Attitudes Regression Coefficients

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$p$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours of SUD training (9-40 hours) (as compared to reference group: 0-9 hours)</td>
<td>.174</td>
<td>.886</td>
</tr>
<tr>
<td>Hours of SUD training (over 40 hours) (as compared to reference group: 0-9 hours)</td>
<td>.194</td>
<td>.890</td>
</tr>
<tr>
<td>Educational Interventions (Reflective Only, Practical Only, Contact Only, Reflective + Practical) (as compared to reference group: No Interventions)</td>
<td>.784</td>
<td>.474</td>
</tr>
<tr>
<td>Educational Interventions (Reflective + Contact, Contact + Practical, Reflective + Contact + Practical) (as compared to reference group: No Interventions)</td>
<td>1.305</td>
<td>.284</td>
</tr>
<tr>
<td>Previous Experience Working with Clients with SUDs (51 to 3000 hours) (as compared to reference group: 0-50 hours)</td>
<td>.116</td>
<td>.924</td>
</tr>
<tr>
<td>Previous Experience Working with Clients with SUDs (over 3000 hours) (as compared to reference group: 0-50 hours)</td>
<td>1.540</td>
<td>.342</td>
</tr>
</tbody>
</table>
### Table 1: Regression Analysis Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of Work with Clients with SUDs (A Few Times a Year to Monthly) (as compared to reference group: Never to Almost Never)</td>
<td>2.541</td>
<td>.105</td>
</tr>
<tr>
<td>Frequency of Work with Clients with SUDs (Weekly to Daily) (as compared to reference group: Never to Almost Never)</td>
<td>4.171</td>
<td>.024</td>
</tr>
<tr>
<td>Working in an SUD Clinic</td>
<td>-0.637</td>
<td>.520</td>
</tr>
<tr>
<td>Role Adequacy/Confidence</td>
<td>.104</td>
<td>.098</td>
</tr>
<tr>
<td>Role Support</td>
<td>-0.056</td>
<td>.560</td>
</tr>
<tr>
<td>Situational Constraints</td>
<td>-0.165</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Experience – Co-worker</td>
<td>.648</td>
<td>.440</td>
</tr>
<tr>
<td>Experience – Family Member</td>
<td>.283</td>
<td>.737</td>
</tr>
<tr>
<td>Experience – Friend</td>
<td>.050</td>
<td>.954</td>
</tr>
<tr>
<td>Emotional Reactions – Afraid</td>
<td>-0.668</td>
<td>.227</td>
</tr>
<tr>
<td>Emotional Reactions – Angry</td>
<td>-1.388</td>
<td>.006</td>
</tr>
<tr>
<td>Emotional Reactions – Disgusted</td>
<td>-0.107</td>
<td>.887</td>
</tr>
<tr>
<td>Attribution Beliefs -- Responsibility</td>
<td>-0.338</td>
<td>.075</td>
</tr>
<tr>
<td>Age</td>
<td>-0.064</td>
<td>.044</td>
</tr>
</tbody>
</table>

*Note: Significant results are in bold. B is the unstandardized regression weight.*

### Discussion

SUDs are a serious health issue across the globe, with far-reaching social, economic, and humanitarian consequences (Wood et al., 2003). The opioid epidemic currently affecting Canada...
and the U.S. is becoming more serious by the day, and our ability to provide effective treatment for SUDs appears to be seriously lacking. Levels of treatment entry are low (Grella et al., 2009) and early treatment dropout, which is associated with an increased risk of relapse, is high (Salamina et al., 2010). Research has shown that perceived stigma from healthcare workers is likely a significant obstacle to the improvement of these metrics (van Boekel, Brouwers, van Weeghel, & Garretsen, 2013). The addition of a counsellor to a patient’s SUD treatment regimen has been shown to significantly increase treatment retention, and the longer a patient remains in treatment, the higher their chances of recovery (Salamina et al., 2010). Counsellors are in a unique position to show compassion, tolerance, and empathy to individuals with SUDs, as the nature of their occupation allows for the development of close therapeutic relationships with clients, which are an integral part of the counselling process (Gaston, 1990). However, given that unconditional positive regard is a crucial factor for the development of the therapeutic relationship (Rogers, 1957), stigma and negative attitudes held by counsellors could negatively affect this development, thus negating the positive effect counsellors have on SUD treatment, and possibly even increasing the likelihood of early treatment dropout. Given the relative lack of past research on counsellors’ attitudes towards clients with SUDs, and the possible significance of these attitudes, two research questions were formulated to address this gap in the literature.

**Counsellors’ Attitudes Towards Clients.** The first research question asked what the attitudes of counsellors are towards working with clients with SUDs and how these attitudes compare to their attitudes towards working with clients with MDD, another commonly encountered disorder in counselling. Scores on the attitudes measure focused on clients with SUDs (MCRS-SUD) ranged from 17 to 54, with a mean total score of 43.1 out of a possible 54 points, with the lowest possible score being 9. This result seems to show that attitudes towards
working with this client group were, on average, generally positive; as well, there were no scores at the extreme low end of the scale. There is no attitudes measure available from the extant literature that focuses on counsellors. The MCRS has been used in previous research but several modifications were required to make the measure appropriate for use with this counsellor sample. As a result, we were unable to make meaningful comparisons between the mean of the total MCRS scores found in this study to attitude scores for other health professionals reported in any previous studies using the original MCRS measure.

We did ask participants to also complete the MCRS for clients with MDD. MCRS-MDD scores ranged from 16 to 54, with a mean total score of 44.16 out of a possible 54 points. A one-way repeated measures ANOVA showed that the difference between the MCRS-SUD and MCRS-MDD means was statistically significant, albeit with a small effect size. Overall, participants’ attitudes towards working with both groups were positive, but they were found to be a little less positive towards clients with SUDs than towards clients with MDD; the lowest score was only one point lower than the lowest score for the MCRS-SUD, and also not at the extreme low end of the scale. This finding of slightly more positive attitudes towards working with clients with MDD was consistent with what we expected, given the higher levels of stigma and lower levels of treatment success associated with SUDs; however, the effect size was smaller than we had anticipated.

There are several possible reasons for this small effect size. One reason relates to a limitation of our study: the fact that our sample was non-random and self-selecting. Even though we recruited from across Canada (one of the strengths of our study), our recruitment strategy did not allow us to recruit a truly representative cross-section of counsellors from across the country. A sample bias that may have occurred due to our non-random recruitment is that counsellors
with more positive attitudes towards working with clients with SUDs may have been more likely to agree to participate in the study than counsellors with more negative attitudes. This is because counsellors with positive attitudes probably also have more interest in helping the SUD population, and thus would also likely have a higher motivation to participate in the study, compared to counsellors with negative attitudes. Another probable reason for the small effect size relates closely to the first reason. Many participants worked regularly with the SUD population, had specialized SUD training, and had years of previous experience working with clients with SUDs; this suggests that the sample may have been biased towards counsellors who were more likely to have had positive attitudes towards working with clients with SUDs. Another sample bias that may have affected our results is that recruitment was mostly done in major cities, which often have large substance-using populations; this would increase the average counsellor’s level of exposure to substance use, which, in turn, could decrease stigma and increase tolerance. As well, it should be noted that several counsellors who were invited to participate in the study replied via email that they thought they would not be an appropriate participant given that they did not work with the SUD client population. Although the study invitation clearly stated that all practicing counsellors were invited to participate, and we still encouraged them to take part, these emails suggest that counsellors who did not work with the SUD population were more likely to believe they were not suitable participants for the study and thus decline the invitation. In hindsight, it would have been better to further highlight the fact that all counsellors were invited to participate in the study, perhaps by underlining, highlighting, bolding, or increasing the size of the font that stated this point.

Comparing the means of the individual MCRS items revealed that the counsellors’ attitudes only differed significantly between the two disorders when a certain type of question
was asked. The first six items, which asked about feelings regarding working with the client group, did not yield any significant differences. Our counsellor participants did not report any differences in enjoyment, difficulty, satisfaction, levels of irritation, or compassion between clients with SUDs versus MDD. This is an optimistic finding. The final three items, which were more focused on beliefs about the treatment of the disorder and its efficacy, were where the differences were found. Basically, significant differences found in the means of items 7, 8, and 9 showed that counsellors were not as optimistic about SUD treatment as they were about MDD treatment. Nor were they as confident about their ability to help clients with SUDs as they were about their ability to help clients with MDD. This result is not surprising as SUDs are notoriously difficult to treat, and levels of treatment dropout and relapse are very high whereas the treatment of MDD has a long and proven track record along with a much higher success rate.

Although less positive attitudes towards SUD treatment and counsellors’ lower confidence in their abilities to treat SUDs do not equate with negative attitudes towards working with the clients themselves, these attitudes do still have the potential to be damaging. For example, a counsellor who is pessimistic about the outcome of treatment may treat their client differently, either consciously or subconsciously, and this may have a deleterious impact on treatment outcomes. It is also possible that a lack of confidence regarding treating SUDs may cause a counsellor to feel apprehensive or anxious around clients with SUDs, therefore undermining their capacity to provide counselling services to the best of their ability.

**Correlates of Counsellors’ Attitudes towards Clients with SUDs.** When analyzed individually, almost all of the IVs were found to have bivariate relationships with counsellors’ attitudes towards working with clients with SUDs (i.e., MCRS-SUD scores); this fits with the extant literature on health professionals’ attitudes. Nonetheless, there was no statistically...
significant bivariate relationship found between MCRS-SUD scores and length of time worked in an SUD clinic, participants’ personal substance use, experience with an intimate partner with an SUD, personal experience with an addiction (behavioural or substance), certain emotional reactions (i.e., sorry and sad), or the attribution belief of control.

Regarding length of time worked in an SUD clinic, the small group size (n=76) for this analysis combined with the fact that the attitude scores in this group were clustered together on the higher end of the scale, and thus less variable, may have been a factor in why no significant relationship was found. However, previous studies had variable results when looking at work experience, so this result isn’t particularly surprising. Group size may have also played a role in the lack of any significant relationship found between personal substance use and personal experience with an addiction and attitudes. For personal substance use, the group sizes for use within the past month were very small for psychedelics (n=6), party/rave drugs (n=4), and hard drugs (n=0), as was the group size for no lifetime use of alcohol (n=19). However, the lack of a relationship found between personal substance use and attitudes was not extremely surprising, given the mixed results found in previous studies. Previous research also suggests that the effect of personal substance use on attitudes may be dependent upon frequency and intensity of use; as we did not collect this information, we were unable to measure any effect that may have been dependent on these variables.

Similarly, very few participants reported having an SUD in the past (n=37) and no relationship was found between this factor and attitudes; this finding was also not surprising, given the lack of any consistent relationship found in the past between these variables. There may also be certain factors about previous addictions that affect attitudes that we did not measure, and this may have affected our results. For example, a counsellor who had an easy time
in recovery may have less of a capacity to empathize with a client who is severely struggling through recovery than a counsellor who also experienced a challenging recovery. If this were the case, then a previous addiction would have the capacity to be related to attitudes either positively or negatively, and the fact that we did not distinguish between these two possible experiences would help explain why we did not see a significant relationship between previous addiction and attitudes. Regarding previous experience with a behavioural addiction, as there is no previous evidence to suggest that there may be a relationship between this variable and attitudes towards clients with SUDs, it was also not surprising that no such relationship was found in the current study.

Two out of the five emotional reactions, sorry and sad, were found to not be related to attitudes. A possible reason for this result with the “sorry” item is that there is some ambiguity in this word; it was reported by some participants in the comments section that this item could be interpreted as being related to either pity or compassion, and that they were unsure as to how to respond. The other emotional reaction, sad, was not previously studied and was added to enrich our data. It is possible that this item could also have been interpreted as pity, and thus yielded a similar result to the “sorry” item. There is also no theoretical evidence to suggest that feeling sad about people with SUDs would be related to attitudes towards clients with SUDs, and thus this result is not surprising.

Interestingly, a previous experience with an intimate partner with an SUD was the only type of personal relationship that was not found to be related to attitudes. There was no previous data to compare to regarding this specific question, but this finding does contradict the common finding that close personal relationships with people with SUDs in general are related to more positive attitudes. One possible explanation for this is that an experience with an intimate partner
with an SUD has the potential to be far more intense, impactful, and possibly traumatic than such an experience with a friend, co-worker, or family member, and thus may increase one’s negative associations with SUDs.

For the attribution belief of control, our results differed from previous research in that we did not find a significant negative bivariate correlation between attribution of controllability and attitudes towards clients with SUDs. One possible reason for this difference is that previous research was conducted with health professionals other than counsellors (e.g., doctors, nurses, and psychiatrists). For these professions, seeing the patient as in control of their SUD may detract from viewing the patient as sick and in need of medical treatment, and therefore lead to more negative attitudes. On the other hand, for counsellors, seeing the client as in control of their SUD may be more of an empowering viewpoint; the counsellor may recognize that the client is suffering and in need of help while also believing that the client has some agency and, with the help of treatment, can gain some control over their disorder.

**Predicting Counsellors’ Attitudes Towards Clients with SUDs.** In the presence of other variables, only frequency of working with SUD clients, situational constraints, frequency of feeling angry toward individuals with SUDs, and age remained as significant predictors of counsellors’ attitudes towards working with clients with SUDs. The model predicted 53% of the variance in MCRS-SUD scores.

Frequency of working with clients who have SUDs remained as a significant predictor of counsellors’ attitudes. This result supports the contact hypothesis (Williams, 1947), which holds that stigmatizing attitudes held by members of a non-stigmatized group towards a stigmatized group are a result of ignorance, and that contact between the two groups will disconfirm stereotypes held by the in-group, thus improving their attitudes. In the current study, counsellors
who frequently saw clients with SUDs had higher levels of contact with the SUD population, at least in the professional context, and this contact had a positive relationship with their attitudes towards working with the client group.

The importance of situational constraints as a predictor of counsellors’ attitudes highlights a critical issue in our current mental health system. Counsellors are feeling constrained by their workplaces in their ability to work with clients with SUDs and these constraints are leading to more negative attitudes amongst the counsellors affected by them. This finding suggests the need for further research into the issue of situational constraints in the workplace. By investigating which of these constraints are the most salient in predicting counsellors’ attitudes towards working with clients with SUDs, and how these constraints can be effectively ameliorated, we could help to illuminate the path towards creating workplace environments that foster the development of more positive attitudes amongst counselling staff. This finding also points to the importance of specialized SUD clinics (where these constraints are presumably lower), and the need for easy access to these clinics, not only in the urban areas that are currently served, but in rural areas where these types of services are often not available.

Counsellors who reported feeling angry towards people with SUDs more frequently were, not surprisingly, found to have more negative attitudes towards working with clients with SUDs, even when controlling for other significant variables. This finding makes sense; anger is a strong emotion that would most likely hinder any sort of objectivity in the formation of counsellors’ attitudes. Counsellors who often feel angry towards people with SUDs would likely try to avoid working with this population in the first place and, even upon a chance encounter, could refer such clients on to other therapists; however, a client in this situation may feel stigmatized and might be less likely to continue to seek treatment after such an experience. It would therefore be
beneficial to explore the causes of this anger amongst these counsellors and find ways to decrease these feelings. One potential way to facilitate this may be to increase contact with the SUD population by incorporating this contact into counsellor training programs as well as professional development programs but it would be important to first determine the reasons that counsellors may feel anger towards these clients.

The fact that age remained as a significant predictor of counsellors’ attitudes in the regression model may reflect the current change we are seeing in societal attitudes towards SUDs; we are slowly moving away from the moralistic judgements of the past and a more open dialogue has begun regarding addiction, its roots in trauma rather than personal moral failure, and the need to focus on treatment rather than punishment. These changes are occurring quickly, and it is not surprising that people from older generations may be less quick to embrace these new viewpoints. As many counsellors from the baby boomer generation are soon to be retiring and a younger generation is set to replace them, this finding of more positive attitudes amongst younger counsellors could be indicative of positive changes for SUD treatment in the near future.

Finally, is it important to acknowledge the role that shared variance between some of the key predictor variables may have played in determining the results of the regression. For instance, frequency of working with clients likely has shared variance with variables such as previous SUD training, educational interventions, hours of experience, working in an SUD clinic, and possibly even personal experiences. Similarly, the situational constraints variable likely has shared variance with role adequacy and role support. As these two variables were the more immediate and salient influences, they remained as significant predictors in the regression, while the other variables, although still important, did not.
**Study Strengths and Limitations.** A key strength of this study is that it is the first study to focus on investigating the attitudes of counsellors and counselling students towards working with clients with SUDs, compare these attitudes with the same sample’s attitudes toward working with another group of commonly seen clients (i.e., clients with MDD), and investigate educational, experience, work-related, and personal variables that are related to these attitudes.

There are several limitations to this study. First, the sample was not a randomly selected and representative sample of the counsellor population, which limits the generalizability of the study findings. Despite recruitment strategies designed to encourage participation from across Canada and from both urban and rural locations, it is likely that a large proportion of participants were from Vancouver, a city that is considered fairly liberal when it comes to drug policy and public opinion about drug use. Other participants in the study will more likely have come from other metropolitan locations in Canada and, as such, rural populations are likely underrepresented in the sample. Second, participants were also self-selecting given that study participation was completely voluntary. It seems likely that counsellors or counselling trainees who already had an interest in addictions counselling (and are therefore also more likely to have positive attitudes towards working with clients with SUDs) would be more inclined to participate in a study about such clients than would their colleagues without such interests. This would result in another sample selection bias. A final limitation is that there are few measures that, in their entirety, are appropriate for use with counsellors; thus, many measures used in the study had to be modified. While these measures did show good measurement properties with this sample, the modifications mean we cannot compare results from this study with previous studies that used the measures in their original form.
Concluding Statement. Despite its limitations, this study provides us with valuable information about counsellor and counselling student attitudes towards working with clients with SUDs. The study findings not only provide a current picture of attitudes towards clients with SUDs in Canada, but also (a) how these compare to the same study participants’ attitudes towards working with clients with MDD, and (b) what variables, based on previous literature, are related to counsellor and counselling student attitudes towards working with clients with SUDs at a bivariate level and in the presence of one another. This research will hopefully spur future research into counsellor and counselling student attitudes towards clients with SUDs and encourage steps to improve more supportive and productive attitudes that have a positive influence on clients with SUDs and their experiences with counselling and other health-related professionals.
References


Chapter 4: Conclusion

Summary of Purpose, Research Questions, and Findings

This study investigated counsellors’ attitudes towards clients with SUDs as well as a range of factors that have been suggested to play a role in influencing these attitudes. This is the first study focused on counsellors that has investigated a comprehensive list of factors derived from previous research that have been found to affect attitudes. With the opioid epidemic at the centre, SUDs are quickly becoming one of the most significant problems we are currently facing in Canada. As the death toll rises, it has become clear that our healthcare system is failing to adequately address this increasingly prevalent issue. Although most residents of urban centres have access to specialized SUD treatment, only one in five Canadians with an SUD sought treatment within the previous year (Canadian Centre on Substance Abuse, 2015). Low treatment entry may be partially due to potential clients’ fear of stigma, which has been found to be a major deterrent to seeking treatment amongst people with mental health problems (Schomerus & Angermeyer, 2008). This fear is not unfounded; despite the changing societal discourse on substance use as well as the general trend toward improving attitudes and the fact that most studies on mental health professionals and counsellors have found generally positive attitudes amongst participants (e.g., Balich et al., 2015; Broadus et al., 2010; Rodgers-Bonnacorsy, 2010), studies (including the present one) have also consistently found a significant minority of counsellors who still hold stigmatizing and stereotypical attitudes and beliefs towards clients with SUDs (e.g., Forman et al., 2001; Gilchrist et al., 2011; van Boekel et al., 2013). However, the current state of counsellors’ attitudes is not well understood due to a lack of recent studies, as well as a lack of studies that focus specifically on counsellors. The current study was conducted to help fill this gap in the literature.
Understanding counsellors’ attitudes is a crucial step in improving quality of care for clients with SUDs; negative clinician attitudes have been found to be associated with increased rates of treatment dropout and relapse (Brener et al., 2010). In the context of counselling, negative attitudes are likely to be even more detrimental to treatment outcomes because they hinder the development of the therapeutic relationship, a factor that is widely considered to be essential to the counselling process (Gaston, 1990). Despite the fact that counsellors with negative attitudes towards clients with SUDs are in the minority, the potential damage that can be done by these negative attitudes remains high. Counsellors may be the first point of contact with the healthcare system for certain clients, and a negative experience could mean the difference between these clients pursuing treatment and improving their lives or foregoing treatment and increasing their chances of overdose and death. Given the importance of counsellors’ attitudes to effective counselling and the importance of counselling to SUD treatment, this study examined an extensive list of potential contributing factors to counsellors’ attitudes from the literature to examine which ones have the greatest relationship with attitudes when studied together.

In the present study, attitudes were found to be generally positive amongst counsellors. However, 11 (4.2%) participants were found to have negative regard scores (scores below 27, the midpoint of the scale) towards clients with SUDs. These results were similar to those of previous studies (e.g., Broadus et al., 2010; Rodgers-Bonacorsy, 2010; van Boekel et al., 2013). In a novel finding, we found that attitudes towards clients with SUDs were slightly but significantly more negative than attitudes towards clients with MDD. However, the items on the MCRS that differed significantly between the two groups were all related to the efficacy of treatment: two items asked about the participants’ ability to help the client group and one was related to the
overall worthwhileness of treating the client group. The differences here reflect the difficulty of treating SUDs and highlight the need to improve counsellors’ skills in this area as well as the need for more research into effective counselling and other treatment interventions for SUDs.

Based on a review of the literature, the following factors were investigated as potentially having significant positive relationships with counsellor attitudes: hours of SUD training, educational interventions (reflective exercises, contact with the SUD population, practical exercises), previous experience with clients with SUDs, frequency of work with clients with SUDs, employment in a specialized SUD clinic, time worked in an SUD clinic, role adequacy/confidence, role support, personal substance use history, personal experience with a close person with an SUD (i.e., co-worker, family member, friend, intimate partner), personal SUD history, personal behavioural addiction history, as well as two negative emotional reactions towards people with SUDs (i.e., sorry and sad). In addition, the following variables were seen to potentially have significant negative relationships with counsellor attitudes: situational constraints, specific emotional reactions to people with SUDs (i.e., afraid, angry, and disgusted), attribution beliefs (control and responsibility), and age. In line with previous research on health professionals, significant bivariate relationships were found between MCRS scores and almost all of these factors, except for the following: time worked in an SUD clinic, personal substance use history, personal experience with an intimate partner having an SUD, personal history of an SUD or behavioural addiction, certain emotional reactions (i.e., sorry and sad), and one of the attribution beliefs (i.e., control). Nonetheless, in a regression analysis, only frequency of work with clients with SUDs (weekly to daily, as compared to the reference group never or almost never), situational constraints, the emotional reaction of anger, and age remained as significant predictors of counsellors’ attitudes towards clients with SUDs in the context of the other
variables. As no previous studies have looked at all of these factors together, the current study offers the first in-depth look at the contributing factors of counsellors’ attitudes and the relative importance of each one.

Implications for Counselling

The findings of this study have some interesting implications for the field of counselling psychology. The attitudes found among counsellors towards clients with SUDs were generally positive overall. This finding is in line with previous research that found counselling to be a key predictor of treatment retention and supports the inclusion of counselling as a positive part of the SUD treatment regimen. There has been little research on the attitudes of other healthcare professionals towards their patients with SUDs in recent years (and they were not included in the present study), so it is not possible to conclude that counsellors have more positive attitudes than their medical counterparts. However, it is important to acknowledge the fundamental differences inherent in the relationships and interpersonal interactions that occur between counsellors and their clients versus those that occur between doctors and nurses and their patients. The most salient of these differences is arguably the amount of dedicated one-on-one attention that occurs between a counsellor and a client versus a doctor and a patient. A counsellor often sees each client for 50 minutes every week, thus enabling the development of a closer therapeutic relationship than would be expected to develop between a doctor and a patient that may only see each other for 15 minutes every couple of weeks. Thus, a doctor and a counsellor might both have extremely positive attitudes towards people with SUDs but, given the nature of their professions, these positive attitudes would likely be more impactful for the clients of the counsellor than for the patients of the doctor. Regardless of whether the attitudes of other healthcare professionals have improved over the years or not, the finding that counsellors
generally have positive attitudes towards clients with SUDs is welcome news for SUD treatment, as a good therapeutic relationship with a counsellor can provide a consistent base of support for people undergoing SUD treatment, thus increasing their chances of continuing with their treatment and being successful in their recovery.

Similar to previous research, a significant minority of counsellors were found to possess negative attitudes towards clients with SUDs. Although most of these counsellors did not report seeing clients with SUDs more than a few times a year, the potential harm that could be done during these infrequent sessions still has the potential to be significant. This finding points to the importance of working towards positive attitudes not just in the counsellors that often work with this population, but in all counsellors.

Frequency of contact with clients remained as a significant predictor of counsellors’ attitudes in the presence of other variables. Although working in an SUD clinic and hours of experience working with the SUD population did not remain significant in the presence of other variables, their shared variance with the more immediate frequency of contact variable is likely the reason for this, meaning that these variables are likely still important. These findings highlight the importance of having a sufficient number of easily accessible SUD counsellors and clinics to serve every community in the country, as well as the importance of ensuring that counsellors maintain frequent exposure to the SUD client group in their training as well as their subsequent work. Most major urban centres have public SUD clinics where specialized SUD counselling is offered, but waitlists to see a counsellor can often be long and rural communities are often underserved. Increased government funding for specialized SUD counselling could help to improve this problem.
Situational constraints also remained as a significant predictor of counsellors’ attitudes in the presence of the other variables; role adequacy and role support did not remain as significant predictors, but this is likely because situational constraints are more salient and share variance with these factors. These findings suggest that the policies and resources of a counsellor’s place of work may have an impact on that counsellor’s attitudes towards clients with SUDs. For instance, more negative attitudes amongst counsellors are associated with workplaces that do not see clients with a wide range of SUDs, do not equally prioritize cases involving SUDs, restrict the amount of sessions that clients can have with counsellors, and do not provide access to consultations with SUD specialists. These findings point to the potential advantages that specialized SUD clinics may over other treatment institutions (e.g., hospitals and general counselling clinics). Counselling clinics could also use these findings to help implement organizational changes that could potentially have a positive impact on the attitudes of their counselling staff. It also may be beneficial for organizations to measure their staff’s confidence in treating the SUD population as well as their opinions on how well they are supported by the organization in working with this client group. This information could be used to target specific counsellors for continuing education as well as to gauge the level of role support in the workplace to determine if it is sufficient or if it requires improvement.

Age was another significant predictor of attitudes in the presence of other variables. This may be related to recent changes in societal attitudes towards substance use; counsellors from older generations have lived through a time where the stigma surrounding SUDs was much greater than it is today, and their attitudes might reflect this. As this older generation retires and is replaced by younger counsellors, we may see a general improvement in counsellors’ attitudes towards clients with SUDs; this is positive news for the future of SUD treatment. This result also
speaks to the importance of providing continuing education that targets counsellors who have been in the field longer and are therefore further away from the day they graduated their counselling training programs; these counsellors may benefit from having a refresher course on SUDs that would also offer the opportunity to bring them up to date with the field of SUD treatment.

Another significant predictor of counsellors’ attitudes in the presence of other variables was experiencing feelings of anger towards people with SUDs. As we did not collect any further information about counsellors’ anger and emotional experiences, it is not possible to know the root of this anger and is therefore difficult to make any recommendations to help improve this problem; however, this finding does suggest that it might be beneficial to investigate ways in which to help counsellors deal with emotions that they encounter in the field.

Interestingly, the amount of SUD training that participants had received did not remain as a significant predictor of their attitudes in the presence of the other factors. Although the correlation between this variable and the frequency of SUD client contact variable ($r_s = .53, p < .0001$) is not overly high (i.e., it is less than .80), it is possible that the latter variable represents more recent and impactful experiences in current attitudes. Thus, as a significant bivariate correlate of counsellor attitudes, it follows that it is still beneficial for institutions to include SUD courses and practica in graduate training programs as well as for counselling organizations to provide continuing education for counsellors in this area. As well, the educational interventions we looked at were also likely encompassed by the frequency of contact variable, so we can also argue that it would be beneficial for SUD training to include a combination of reflective, practical, and contact-based interventions.
Study Limitations

There are several significant limitations to this study that should be acknowledged. The first limitation is related to recruitment. Due to the anonymous nature of the study, it is not possible to know the geographical distribution of study participants, but it is likely that there was an overrepresentation of counsellors from the Metro Vancouver area. Although study invitations were sent out to counsellors from every province in Canada, the response rates in Metro Vancouver were likely higher because of the researcher’s personal connections to the local counselling community. As Vancouver is generally known as a region with more progressive views on substance use, this may have given the results a positive bias. The self-selecting nature of the study’s recruitment may have also skewed the results in a positive direction; the counsellors who chose to participate in the study were probably more concerned with the issue of SUDs and more interested in working with the SUD client population than the counsellors who chose not to participate, and therefore likely had more positive attitudes than the average counsellor. One final issue with recruitment was the tendency of participants who did not regularly see clients with SUDs to decline the survey invitation. Although the invitation clearly stated that all counsellors were welcome to participate, several potential participants responded to the study invitation email stating that they were unable to participate due to their lack of work with the SUD population. This bias was reflected in the results of the study, as only 77 (29.3%) respondents reported working with clients with SUDs on less than a monthly basis.

Another significant limitation of the study relates to the measures that were used for data collection. No previous studies on counsellors were found that made use of an attitudes measure with acceptable psychometric properties. We therefore decided to use an attitudes measure, the MCRS, that was originally created for use with physicians, and thus required modification for
use with counsellors. In addition, the various measures that were used to collect data on the independent variables were also not designed for use with counsellors, and therefore also required modification. Unfortunately, this made it impossible to directly compare the results from the current study with previous studies that used the scales in their original form.

As a caveat to interpreting the study’s findings, the correlational nature of the data used in the analyses must be acknowledged. That is, we are unable to show directionality or causation, given only correlational data. For example, we found that frequency of contact was positively related to attitudes towards clients with SUDs, but we cannot definitively state if the frequency of contact leads to the positive attitudes or if the positive attitudes lead to the frequency of contact. The same limitation applies to all the factors that were found to be related to attitudes in this study.

It should also be acknowledged that attitudes are not an easy variable to measure. Research has shown that people are generally unwilling to recognize their own prejudices and, as such, often push them into their unconscious mind (Dovidio & Gaertner, 1998). Given that our sole attitudes measure relied on self-report, we were limited to collecting data on the conscious attitudes of our participants; that is, the conscious attitudes that our participants were willing to admit. As measures of implicit prejudice have been found to more accurately predict behaviour than measures of explicit prejudice (Greenwald, Poehlman, Uhlmann, & Banaji, 2009), the fact that we did not measure implicit prejudice is worth noting as a key limitation to the study.

Some other issues with the measures were illuminated in comments and feedback from the participants. Several respondents commented that the item asking if a client was responsible for his or her disorder was ambiguous in that it could be interpreted in two different ways: either the client is responsible for having developed an SUD or the client is responsible for their
recovery. This ambiguity may have resulted in a split amongst participants in how this question was interpreted and answered and thus raises questions about the validity of the data for this item. Another ambiguity was reported in the emotional reaction item that asked if the participant felt “sorry” for people with SUDs. Some participants were not sure if “sorry” in this context meant compassion or pity. Again, this ambiguity may have led to some inconsistency in the data.

Another participant commented that there was no item that asked how many hours of supervision a participant had received for working with clients with SUDs. Although some respondents may have included their supervision hours in their response to the item that asked about SUD training, the item did not ask participants to do so and thus it is likely that many participants left these hours out of their response. Supervision is an integral part of a counsellor’s training and professional development and an item addressing previous SUD supervision should have been included in the survey to obtain a more complete history of the participants’ SUD training.

**Directions for Future Research**

The findings of this study suggest some directions for future research. Now that we have a broad idea of what counsellors’ attitudes towards clients with SUDs are like, it would be interesting to conduct a qualitative study with counsellors to develop a more in-depth understanding of their attitudes. As well, both qualitative and quantitative studies of the client’s experience of counsellors’ attitudes could help to round out the knowledge generated in the current study. The counsellors in our study may have reported fairly positive attitudes, but this finding does not guarantee that clients are interpreting their counsellors’ attitudes as such; ultimately, the client’s experience is what matters the most, and thus is an important direction for future research. It would also be valuable to conduct a study with counsellors and their clients to
investigate the relationship between the attitudes reported by counsellors and experienced by their clients.

Another direction for future research pertains to counsellor education. The findings of this study suggest that SUD training for counsellors has room for improvement and it would therefore be valuable to investigate new interventions and strategies for SUD education that could be implemented to help make our current programs more effective. As well, it could also be beneficial to conduct a survey study on the various SUD courses and practica opportunities offered in counselling training programs across the country. Such a study would provide valuable information on the current state of SUD training for counsellors in Canada and help us to understand what is working, what needs improvement, and how we can best focus our resources to provide improvements. Feedback from counsellors working with SUDs would be beneficial as well.

The current study yielded some valuable knowledge about counsellor attitudes but, as mentioned in the previous section, the sample was likely biased to include counsellors that had more positive attitudes than the average. It is important to note that SUDs may arise in any area of counselling (e.g., family, individual, employment) and therefore any counsellor may encounter a client with an SUD, whether they have chosen to treat this client group or not. A future study that includes only counsellors who see clients with SUDs infrequently would be valuable because it would allow us to better understand the attitudes of counsellors who may be more likely to harm such clients given a lack of training or experience (i.e., counsellors who do not specialize in treating SUDs), thus providing some insight on how we can best work to support these counsellors and their clients.
As mentioned above in the limitations section, the current study only measured the explicit attitudes of counsellors. A study that looks at both implicit and explicit attitudes, the relationship between them, and the relationship of each to behaviour could also be a valuable research direction for the future as it would provide us with a more complete understanding of counsellors’ attitudes.

Another direction for future research pertains to the anger that some counsellors reported feeling towards people with SUDs. Counsellors who feel angry may be experiencing burnout or frustration working with their clients who have SUDs, may be having personal issues with friends or family who have SUDs, or may just generally be angry with people with SUDs because of certain stigmatizing beliefs and biases that they may hold. Given the importance of this factor and our lack of knowledge pertaining to it, it would be an interesting topic to explore in future research.

One final important direction for future research is the development of a new measure of counsellors’ attitudes towards different client groups, as the modified MCRS used in the current study does have some weaknesses. For one, the item that asks about giving extra time to clients may not be applicable to the counselling profession. This item does make sense in the context of the original MCRS as doctors generally have flexibility in terms of the length of appointments; however, counsellors have a set amount of time scheduled for each client and usually only exceed this time in the case of an emergency. It should be noted that several participants pointed out the issue with this item in the comment section of the questionnaire. Another item that may not be appropriate for measuring counsellors’ attitudes is the item that asks if the client group is particularly difficult to work with. For instance, a counsellor might endorse that they find it difficult to work with this client group simply because of the challenges inherent to treating
SUDs and not because of any negative biases or stigmatized attitudes that they may hold towards these clients. Similarly, the item that asks if the counsellor believes there is little they can do to help the client group may tap more into the counsellor’s beliefs about their ability to treat SUDs rather than their attitudes towards people with SUDs. For example, a counsellor may have no stigmatized attitudes towards clients with SUDs and hold them in high regard, while also recognizing that the client may be better served by a counsellor with more training in SUD treatment. These weaknesses in the MCRS provide a rationale for the development of a new scale that is specifically designed to measure the attitudes of counsellors towards different client groups.

Concluding Statements

This study investigated the attitudes of counsellors towards clients with SUDs. Unlike any previous study, this study also compared these attitudes with attitudes towards clients with MDD and examined an exhaustive list of factors that had previously been shown to contribute to these attitudes in counsellors and other health professionals, to determine which of these factors were the most salient. Although attitudes towards MDD were found to be slightly more positive, and a small minority of participants were found to have negative attitudes towards clients with SUDs, most participants reported having positive attitudes towards clients with SUDs. The most salient factors that contributed to attitudes were frequency of contact with clients with SUDs, feelings of anger towards clients with SUDs, situational constraints in the workplace, and age. This information provides us with some valuable insights about the current state of counsellors’ attitudes and how these attitudes may be improved in the future; it also suggests some interesting directions for further research as we work towards the goal of improving quality of care for people with SUDs.
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## Appendix A: Recruitment Resources Table

<table>
<thead>
<tr>
<th>Counselling Clinics</th>
<th>Professional Associations</th>
<th>Other (health authorities, non-profit organizations)</th>
</tr>
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<tbody>
<tr>
<td>• The Adler Centre</td>
<td>• Native Courtworker and Counselling Association of BC</td>
<td>• Vancouver Coastal Health</td>
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<tr>
<td>• Jericho Counselling</td>
<td>• British Columbia Association of Clinical Counsellors</td>
<td>• Mood Disorders Society of Canada</td>
</tr>
<tr>
<td>• Willow Tree Counselling</td>
<td>• Canadian Professional Counsellors Association</td>
<td>• The Canadian Association for Spiritual Care</td>
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<td>• Shanti Counselling Centre</td>
<td>• Canadian College of Professional Counsellors and Psychotherapists</td>
<td>• Career Development Association of Alberta</td>
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<tr>
<td>• Homewood Health Clinic</td>
<td>• Canadian Addiction Counsellors Certification Federation</td>
<td>• Island Health</td>
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<tr>
<td>• UBC Student Health</td>
<td>• Saskatchewan College of Psychologists</td>
<td>• Boys and Girls Club of South Coast B.C.</td>
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<tr>
<td>• First Nations House of Learning</td>
<td>• College of Psychologists of Ontario</td>
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<tr>
<td>• East Metro Youth Services</td>
<td>• College of Registered Psychotherapists of Ontario</td>
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<tr>
<td>• Christian Counselling Services</td>
<td>• Association of Psychologists of Nova Scotia</td>
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<tr>
<td>• Toronto Psychological Services</td>
<td>• Native Alcohol and Drug Abuse Association of Nova Scotia</td>
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<tr>
<td>• The Redpath Centre</td>
<td>• Nova Scotia College of Counselling Psychotherapists</td>
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<tr>
<td>• The Mindfulness Clinic</td>
<td>• Canadian Psychological Association</td>
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<tr>
<td>• Better Life Counselling Centre</td>
<td>• Professional Association of</td>
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<tr>
<td>• Canadian Centre for Addictions</td>
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<td>Christian Counsellors and Psychotherapists</td>
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<tr>
<td>Ontario Psychological Association</td>
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<tr>
<td>Medical Psychotherapy Association Canada</td>
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198