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# The Measurement of Counselors' Emotional Intelligence and Client Treatment Outcomes in Addiction Treatment Settings

VonZell Wade

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THE MEASUREMENT OF COUNSELORS' EMOTIONAL INTELLIGENCE AND CLIENT  
TREATMENT OUTCOMES IN ADDICTION TREATMENT SETTINGS

A Dissertation

Submitted to the School of Education

Executive Counselor Education and Supervision Program

Department of Counseling, Psychology, and Special Education

Duquesne University

In partial fulfillment of the requirements for  
the degree of Doctor of Philosophy

By

VonZell Wade

December 2015

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2015

**DUQUESNE UNIVERSITY**  
**SCHOOL OF EDUCATION**  
**Department of Counseling, Psychology and Special Education**

*Dissertation*

Submitted in Partial Fulfillment of the Requirements  
For the Degree of Doctor of Philosophy (Ph.D.)

**Executive Counselor Education and Supervision Program**

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**September 8, 2015**

THE MEASUREMENT OF COUNSELORS' EMOTIONAL INTELLIGENCE AND  
CLIENT TREATMENT OUTCOMES IN ADDICTION TREATMENT SETTINGS

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## ABSTRACT

# THE MEASUREMENT OF COUNSELORS' EMOTIONAL INTELLIGENCE AND CLIENT TREATMENT OUTCOMES IN ADDICTION TREATMENT SETTINGS

By

VonZell Wade

December 2015

Dissertation supervised by David Delmonico

Residential adult drug and alcohol treatment centers have yet to investigate the relationship between counselors' emotional intelligence and client success. The purpose of this study was to determine if a relationship exists between the emotional intelligence as well as the personal and professional characteristics of counselors working in residential drug and alcohol treatment centers and client success in treatment. Suggestions for future research include clarifying the relevance of emotional intelligence for a larger sample size, and developing a greater knowledge of risk factors that can contribute towards unsuccessful client treatment stays.

## DEDICATION

Dedicated to my lovely wife Laurie Johnson-Wade. Thank you for being so supportive and my biggest fan and friend. Through it all you stuck with me. Without your support, dedication, sacrifice, and prayers I could not have accomplished this. I love you to the moon and back.

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# CHAPTER I

## INTRODUCTION

In the last few decades, researchers have reiterated the importance of emotional intelligence as an imperative predictor of success at the academic, interpersonal, professional, and organizational levels. The scrutiny of this relationship has also been extended to the outcomes in domains of counseling and psychotherapy. However, further research must be conducted to accumulate evidence for such a relationship and decipher the mechanisms underlying it. Like self-awareness, emotional intelligence of a counselor or a psychotherapist has been regarded as an important dimension for a successful counseling process. Numerous empirical studies conducted have examined the role of emotional intelligence in predicting the outcomes of counseling and psychotherapy in different settings. It has been found, for example, that emotional intelligence factors successfully predict counseling self-efficacy of both counseling students and practicing counselors.

Emotional intelligence (EI) is an important predictor of performance in organizational, social, personal, academic, and other domains. Researchers have consistently reiterated the role of EI as a correlate of life satisfaction, psychological well-being, occupational success, and job performance (Adeyemo & Adeleye, 2008; Bar-On, 1997, 2005; Salovey & Mayer, 1990). EI is thought to matter twice compared to the intelligence quotient (IQ) given the relevance of emotional quotient (EQ) to an individual's performance in various spheres of life (Goleman, 1998). Theoretically, various components of EI have been emphasized by pioneers in counseling and psychotherapy. Carl Rogers, for example, discussed the role of empathy as central to the healing of a client. The 21st century witnessed the turn of counseling process from “tools and techniques” to “therapist variables” in determining the effective outcomes. The subsequent

researches, some of which were presented in this paper, have empirically validated these propositions. Such studies have important implications for individuals who are professionals in counseling and psychotherapy, and also for those who aspire to work in these realms.

Easton, Martin, and Wilson (2008) presented Phase II of a 9-month study of the relationship between emotional intelligence and counseling self-efficacy. In this study, 118 counselors-in-training and professional counselors completed the Counseling Self-Estimate Inventory (COSE) and Emotional Judgment Inventory (EJI). There was a significant correlation between 2 of the EJI scales (Identifying Own Emotions and Identifying Others' Emotions) and 4 of the 5 COSE scales. Students' perceived counseling self-efficacy showed a significant gain when compared with that of professional counselors over the 9-month period. These results supported the findings of their Phase I study, which indicated that emotional intelligence may be a unique construct inherent in persons who are preparing for careers as professional counselors. Studies on psychotherapy also point to a similar linkage. For instance, Kaplowitz, Safran, and Muran (2011), in a small pilot study, assessed psychotherapist EI to examine its relationship with outcome and process. Therapists with higher ratings of EI achieved better therapist-rated outcome results and lower drop-out rates compared with therapists with lower ratings of EI. It was found that higher therapist EI was significantly associated with increased patient assessment compliance. These findings offer preliminary support for the relevance of therapist EI to psychotherapy. It can be concluded that a thorough understanding of this construct and its incorporation in the training modules for counselors and psychotherapists in training will lead to their skill enhancement and positive outcomes during the counseling process.

## **Background**

Emotional intelligence (EI) has attracted growing interest in relation to various educational, health, and occupational outcomes (Boyatzis & Saatscioglu, 2008; Landy, 2005; Van Roo & Viswesvaran, 2004). Salovey and Mayer first proposed their theory of emotional intelligence in 1990. Over the subsequent decade, their theory became a major topic of interest in social science circles as well as in the lay public. Emotional intelligence has been described as a form of social intelligence that involves the ability to identify and monitor one's own emotions and behaviors as well as those of others (Salovey & Mayer, 1990). The main emphasis of research in the field of emotional intelligence is to understand how individuals perceive, discriminate, and manage emotions in an attempt to predict and promote personal effectiveness (Cherniss, 2002).

Evolving research will broaden the spectrum of psychological theories that explain how individuals flourish in their lives, jobs, families, and as citizens in their communities (Goleman, 2000; Mayer, Caruso, & Salovey, 1999; Grewal & Salovey, 2005). Emotional intelligence abilities may have an overall positive impact on work environments in most fields, and it is suggested that these core competencies are perhaps of particular importance in the health care environment (Freshman & Rubino, 2002).

### **Emotional Intelligence in Counseling**

Several aspects of emotional intelligence are very important for those with counseling, helping, or mentoring roles (Lister, 2012). Emotional intelligence refers to the ability to perceive, control, and evaluate emotions. Some researchers suggest that emotional intelligence can be learned and strengthened, whereas others claim it is an inborn characteristic. Since 1990, Peter Salovey and John D. Mayer have been the leading researchers on emotional intelligence.

In their influential article “Emotional Intelligence,” they defined emotional intelligence as, “the subset of social intelligence that involves the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions” (p. 5).

Emotionally intelligent people bring their skills to all relationships, including those with managers, colleagues, and friends. The overall impression given by these individuals is a reputation for being amenable, considerate, friendly, and competent (Lister, 2012). According to Daniel Goleman (1996), “Setting the emotional tone of an interaction is, in a sense, a sign of dominance at a deep and intimate level” (p. 55). Thus, emotional intelligence can result in driving the emotional state of another person. In the same way, a good speaker can drive the emotions of an audience. The effects of this can be seen when an influential politician or popular evangelist is speaking. Those with emotional intelligence are often sought out for guidance. Their ability to absorb relational cues can be used to maximize the potency and productivity of the client counselor therapeutic relationship (Lister, 2012).

### **Statement of the Problem**

For more than half a century, empirical research on psychotherapy and counseling has become a widely accepted and continually expanding area of investigation (Carr, 2011). For most of this time, research has focused on the development of competence by demonstrating such therapeutic skills as attending behavior, clarifying the client’s message through encouraging and paraphrasing, observing and reflecting feelings, and summarization (Ivey, Packard, & Ivey, 2006). However, psychotherapy researchers have given considerably less attention to the personal and professional attributes and contributions of the counselors themselves (Wampold & Hubble, 2010). The paucity of research on counselors has been attributed to the assumption that

it is the methods, techniques, and therapeutic procedures, in and of themselves, that are effective in treating clients (Lebow, 2006). The personal element in psychotherapy research, on the other hand, is viewed as a source of error in research to be minimized or controlled for as opposed to being considered a crucial variable in itself (Wampold, 2001). Due to this misguided belief that properly trained counselors are essentially interchangeable, a scientific culture that favors the study of psychotherapies over the study of psychotherapists has become firmly established over the years (Orlinsky & Ronnestad, 2005). Therapists are not interchangeable, and psychotherapy—even within particular schools or forms of therapy—is not a homogeneous form of treatment. Detailed manuals and intensive training in the conduct of therapy do not eliminate the complex elements of the therapeutic encounter, nor do they reduce the therapist to a technician who merely has to apply certain standardized treatments for specific and clearly delineated symptoms. Thus, it is problematic to assume that the active ingredients in psychotherapy can be reduced to a series of individual, easily definable therapeutic techniques.

Noting that counseling professionals increasingly recognize the role of personality characteristics in evaluating students for admission and retention in counseling programs, Pope and Kline (1999) compiled a list of 22 personality characteristics assumed to be connected with counselor effectiveness. Ten counselor educators were asked to rank order these characteristics in terms of importance and responsiveness to training. The top ranking five of these characteristics were acceptance, emotional stability, open-mindedness, empathy, and genuineness.

Although these researchers have found that the personality of the counselor has been linked with counseling efficacy, there has been little research to examine how a counselor's personality characteristics impact satisfaction and self-perceived efficacy in counseling. It is

argued that personality characteristics should be included in a student's profile at the onset and throughout training (Bernard & Goodyear, 1998). There is also growing recognition that a counselor education program's screening process should be concerned with personality characteristics and a screening device developed to assess personality characteristics to help predict the potential success of applicants (Pope & Kline, 1999).

### **Purpose of the Study**

The purpose of this study was to determine if a relationship exists between the emotional intelligence as well as the personal and professional characteristics of counselors working in residential drug and alcohol treatment centers and client success in treatment.

### **Research Questions**

1. Are there personal and/or professional characteristics of addiction counselors that contribute to a client's success in treatment?
2. Does the counselor's emotional intelligence play a role in a client's success in residential addiction treatment?

### **Importance of the Study**

Although EI is an appealing prospect to some, its benefits to clinical practice, education and selection in any health care discipline have yet to be adequately explored (Elam, 2000). Researchers have only recently begun to explore the possibility that EI may be of benefit to either the professional or the client. Given the scarcity of rigorous research in other disciplines, a more cautious approach should perhaps be adopted to the investigation of these individual differences in managing emotions and its impact on health care outcomes. EI training in the business community is a lucrative business, and testing using current instruments is expensive and complex. Without the empirical evidence to support the idea that many health care

outcomes can be improved by increasing EI in health care professionals, widespread adoption of programs to increase EI should not be considered without further investigation (Elam, 2000).

This study investigated the emotional intelligence (EI) of counselors working in adult drug and alcohol facilities located in Western Pennsylvania. The particular focus was in measuring counselors' EI with the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) and identifying the type of discharge their assigned client receives at the end of their treatment stay. Researchers often express concern with the neglect of counselor variables in outcome studies (Vocisano, Klein, & Arnow, 2004). The few studies focusing on counselor characteristics confirm that counselors vary substantially in their success even after controlling for client and treatment variables (Huppert et al., 2001).

Those studies that have investigated counselor qualities typically focus on general characteristics such as gender, ethnicity, and years of experience (Vocisano et al., 2004). However, a growing consensus within the literature suggests looking to the relational skills of the counselor to locate the active ingredients of therapeutic change (Skovholt & Jennings, 2004). Based on a review of contemporary literature on relational theory, Safran and Muran (2000) characterized one facet of counselor competence as the counselor's ability to correctly perceive, process, understand, and appropriately respond to the relational dynamics between the counselor and client. According to a separate literature, based on the research areas of cognition and affect, such relational skills are part of an individual's EI. While a variety of EI models appear in the literature, it is generally understood the capacity to use emotional information to both understand and navigate the social world (Mayer, Salovey, & Caruso, 2008).

## **Theoretical Framework**

The theoretical framework that guided this study is the Mayer, Salovey, and Caruso (2004) model, expanded by Caruso and Salovey (2004), which asserted that emotional intelligence involves the ability to reason with and about emotions, and the capacity of emotion to enhance thought. The Mayer, Salovey, and Caruso model was chosen because of the model's localization to the specific interaction between emotion and cognition. In addition, this model is the only EI model to be classified as a true intelligence (Mayer, Caruso, & Salovey, 2004). Of the available EI models, the Mayer, Salovey, and Caruso model has received the most rigorous testing and support. The Mayer, Salovey, and Caruso model is the only framework that features an accompanying abilities measure of the construct (Caruso & Salovey, 2004). Four abilities or skills, referred to as branches, make up the model: (a) perceive emotion, (b) use emotion to facilitate thought, (c) understand emotion, and (d) manage emotion (Caruso & Salovey, 2004).

## **Summary of Methodology**

This study utilized a correlational, exploratory research design to explore the relationship between counselors' emotional intelligence and client's discharge status. The study addressed the role that a counselor's emotional intelligence plays in the outcome of intensive treatment for addiction clients as identified by the following three discharge statuses: Successful, Unsuccessful, and Against Medical Advice. In this framework, EI involves the "abilities to perceive emotions, to access and generate emotions to assist thought, to understand emotion and emotional knowledge, and to regulate emotions reflectively to promote emotional and intellectual growth" (Caruso & Salovey, 2004, p. 306). The construct focuses on a person's skill in recognizing emotional information and on carrying out abstract reasoning using this emotional information (Caruso & Salovey, 2004).

Participants consisted of drug and alcohol counselors employed in drug and alcohol treatment facilities in Pennsylvania and included counselors of the drug and alcohol profession who have a Bachelor's degree or above, and who provide counseling services at least 51% of the time. This study used the MSCEIT to measure EI and a discharge summary to measure discharge status from drug and alcohol inpatient setting.

### **Definition of Terms**

**Against medical advice.** Assigned to any individual who decides to leave treatment early despite his or her counselor's recommendation to stay in treatment.

**Emotional Intelligence.** A class of intelligence that combines intelligence and emotion (Caruso & Salovey, 2004). Mayer, Caruso, and Salovey (2004) defined EI as follows:

Emotional intelligence involves the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth. (p. 35)

EI is "a member of a class of intelligences including social, practical, and personal intelligences" (p. 197). EI is composed of four abilities or branches:

1. The ability to perceive emotion.
2. The ability to use emotion to facilitate thoughts.
3. The ability to understand emotions.
4. The ability to manage emotion

**Successful discharge.** Assigned to an individual who enters substance abuse treatment; follows a prescribed treatment plan; and stays for the suggested amount of days as identified by his or her primary counselor.

**Unsuccessful discharge.** Assigned to an individual who refuses to adhere to facility rules and/or participate in his or her treatment. It is important to note that in this study unsuccessful discharges are comprised of the following three components: administrative discharge (granted to an individual who enters into treatment and during his or her treatment stay loses funding to pay for his or her treatment), behavioral discharge (granted to an individual who enters into treatment and refuses to follow pre-established facility rules), and AMA (against medical advice) which is granted to any individual who decides to leave treatment early despite his or her counselor's recommendation to stay in treatment.

## **CHAPTER II**

### **LITERATURE REVIEW**

This chapter provides an overview of the constructs of emotional intelligence as well as adult drug and alcohol treatment outcomes. The first section briefly discusses the evolution of emotional intelligence, and how its definition has caused disagreement among theorists. A discussion of emotions and the link between emotions and intelligence is discussed. Gender differences within the construct of emotional intelligence are reviewed. The second section explores the construct of adult drug and alcohol treatment outcomes, with an emphasis on irregular and against medical advice discharges.

#### **Emotional Intelligence**

Counselor educators have sought to determine what is most salient to emphasize in counselor training—personality traits and relationship building or knowledge and skills (Crews et al., 2005). Grenavage and Norcross (1990), Lambert (1989), Stein and Lambert (1995), and Stevens, Dinoff, and Donnenworth (1998) all stated that personality traits were more salient than techniques. In the same vein, Ivey and Ivey (2003) indicated that one critical factor in developing competency and natural counseling style is emotional intelligence.

#### **Defining Emotional Intelligence**

The nature of EI and subsequent literature has been studied for a quarter of a century. The inception point of EI literature has been conceptualized (Palser, 2004) as Gardner's work entitled *Frames of Mind: The Theory of Multiple Intelligences* (Gardner, 1983). The most recent contribution to the literature is Mayer, Salovey, and Caruso's (2008) article in *The American Psychologist* entitled "Emotional Intelligence: New Ability, or Eclectic Traits?" Goleman (1995) popularized the construct of EI, which includes a combination of characteristics. Mayer,

Caruso, and Salovey (1993) defined EI as “the ability to monitor and discriminate the emotion of self and other” (p. 153). It has also been described as the “ability to recognize the meanings of emotions and their relationships and to reason and problem solve on the basis of them” (Mayer, Caruso, & Salovey, 1999, p. 267). Since counselors are often faced with the task of recognizing meanings of emotions and their relationships and subsequently using those to problem solve, the second of the two definitions would serve as the operational definition in this study, which relates EI to counselor skill development.

EI, as defined by Mayer and Salovey (1997), conceptualizes the construct as closely linked to intelligence. Salovey and Mayer (as cited in Mayer & Salovey, 1993) indicated that EI falls under the category of a social intelligence. There was some discussion about using the term competence rather than the term intelligence to define this ability; however, Mayer and Salovey (1993) reported that they chose the term intelligence partly because it could be connected to the historical literature on intelligence. This includes the work of Gardner (1983), who used the terminology intrapersonal intelligence, which included in its most basic form an ability to distinguish between pleasure and pain and in its most advanced form involved the ability to detect and examine symbolic feelings and the ability to distinguish between complex feelings.

Gardner’s research continues to thrive; he was one of three principal investigators who developed the Good Work Project in 1994. Since that time, more than 50 researchers from five different universities have been involved with the research (President and Fellows of Harvard College, 2007). Despite the contributions of a multiplicity of researchers working together on several projects and the ongoing research on the construct of intelligence and related topics, there is over a century of debate regarding the use of the term and the measurement of the construct (Matthews, Zeidner, & Roberts, 2002). Summarizing the past 100-plus years of literature on

general intelligence is beyond the scope of this paper. However, for the purposes of this study it is important to examine the history of EI and its etiology. The lack of consensus in the field indicates a need for ongoing research on both general intelligence and multiple intelligences.

### **Emotional Intelligence Development**

The traditional view on intelligence has been that many of the skills necessary for success have their etiology with the factor of intelligence or ability (Brand, 1996; Jensen, 1998; Ree & Earle, 1993; Schmidt & Hunter, 1998; Spearman, 1927; Sternberg & Hedlund, 2002). General cognitive ability has been referred to as “the most widely studied predictor used in personnel decisions” (Sternberg & Hedlund, 2002, p. 144). However, Sternberg and Hedlund indicated that literature on intelligence is marked with controversies over a number of issues including measurement, differences between subgroups, whether intelligence is a stable or modifiable trait, and relevance to everyday life. Sternberg (1985) agreed that there is more to intelligence than what is represented by the traditional IQ test. Researchers have reflected on and developed studies that are consistent with this concept by examining and identifying other components of intelligence, including interpersonal and intrapersonal intelligence (Gardner, 1983), creative intelligence (Sternberg, 1985), practical intelligence (Sternberg, 1993), and EI (Salovey & Mayer, 1990).

The developments of these multiple intelligences reflect the aforementioned trend of broadening the concept of IQ. Despite the allure of a precise score associated with an IQ test, as Sternberg (1984) emphasized, it only accounts for 5% to 25% of the variance in scholastic performance and the precision of the score is not synonymous with validity. Sternberg suggested that one test instrument would not be effective in measuring intelligence but may be enhanced by measuring the components that comprise the construct of intelligence. However, the question

remains, “What accounts for the remainder of the variance (the other 75% to 95% that IQ leaves to chance)?” This question gives some insight into the trend toward developing multiple intelligences such as the aforementioned interpersonal, intrapersonal, creative, practical, and emotional intelligences. Gardner (1983) was a primary researcher in this area and argued that there were multiplicities of intelligences, thus charting a new path for research on intelligence. He suggested that there were seven different intelligences to be exact, two of which he identified as socio-emotional. Gardner’s socio-emotional intelligence started the forward movement into the research that has led to the increase in studies of multiple intelligences including EI (Matthews et al., 2002).

In addition to Gardner (1983), other contributors have been credited theoretically (Palser, 2004). These researchers include Wechsler (1940, 1958) for presenting alternate content to intelligence measurements and Thorndike (1936) for his contribution to social intelligence (Thorndike & Stein, 1937). Mayer, Salovey, and Caruso (2000) also credited Payne (1986) for developing a philosophical framework for EI in his doctoral dissertation—*A Study of Emotion: Developing Emotional Intelligence, Self-Integration, Relating to Fear, Pain, and Desire*—that contributed to the development of the current construct. Mayer (1999) indicated that he and Salovey were the first researchers to define EI formally and suggested that it could be measured as ability in their articles published in 1990. The pioneers in the field of EI, Salovey and Mayer (1990), originally defined EI as “the subset of social intelligence that involves the ability to monitor one’s own and other’s feelings and emotions. To discriminate among them and to use these feelings to guide one’s thinking and actions” (p. 190). In other words, EI was considered a component of social intelligence that involved the ability to regulate feelings and to use these feelings to guide behavior. Salovey and Mayer (1990) emphasized the etiology of EI as

originating with Gardner (1983) and credited him for developing social intelligence, which is also known as personal intelligence. This intelligence was said to include interpersonal intelligence—which includes knowledge of others—and intrapersonal intelligence—which includes knowledge of self. Salovey and Mayer noted that one of Gardner’s aspects of personal intelligence involves feelings, which is similar to the definition to which Salovey and Mayer adhere. The specific link is in the ability to utilize one’s personal feelings as well as the feelings of others in order to problem solve and regulate behavior (Gardner, 1983; Salovey & Mayer, 1990).

However, Goleman (1995) wrote a book entitled *Emotional Intelligence: Why It Can Matter More than IQ*. Goleman’s work along with subsequent popularization through other media such as Time Magazine (Gibbs, 1995) has made claims regarding EI such as, “It’s not your IQ. It’s not even a number. But EI may be the best predictor of success in life, redefining what it means to be smart.” The scientific literature has not substantiated these claims, and this has created some confusion regarding the construct of EI (Mayer, 1999). The scientific literature on the construct did not provide a “clearly identified construct for emotional intelligence” (Matthews et al., 2002, p. 4). Three different perspectives on EI were developed and published in 2000 (Palser, 2004). These three perspectives include (a) EI as Zeitgeist, (b) EI as personality, and (c) EI as mental ability (Mayer, Salovey, & Caruso, 2000).

### **Emotional Intelligence Models**

EI as Zeitgeist refers to the place of the construct within modern culture. Palser (2004) suggested that one possibility for this trend in modern culture could be the post-Cold War information age or post-modernism, generated angst, and a cultural appetite for an emotional experience. Time Magazine’s reference to EI stated that “emotional intelligence may be the best

predictor of success in life” (as cited in Mayer, Caruso, & Salovey, 2000), and this may have also contributed to the increased attention on the construct of EI. Practical researchers, including educators and psychologists, were sensitive to this movement and studied EI from an applied practical perspective (Palser, 2004). Goleman (1995) described the characteristics of the 21st century: “these millennial years are ushering in an Age of Melancholy, just as the 20th Century became an age of anxiety” (p. 240). After describing the modern age of depression in his popular press book, he interjected solutions that involved emotional skills. For example, he referred to Seligman (1980), who is known as the father of positive psychology, and a 12-week after-school program that Seligman developed with colleagues to teach emotional skills to 10- to 13-year-olds.

The concept of offering hope in situations that seemed hopeless and linking concepts to the new and growing field of positive psychology created a fertile environment for the trend toward practically applying components of what the popular press referred to as EI. It has been suggested that Goleman’s (1995) text was written as a rebuttal to *The Bell Curve* (Matthews & Zeidner, 2000). Some of the theoretical framework that Goleman (1995) used to build the framework for his text, *Emotional Intelligence*, came from academic literature including the work of Gardner (1983) and Seligman (1980). The popularized information regarding EI has been accurately depicted as a bane to academic researchers (Palser, 2004). Despite the pervasive conceptualization of EI as *Zeitgeist*, another stream of the construct arose (Palser, 2004). The second conceptualization of EI views the construct as personality. Vernon, Petrides, Bratko, and Schermer (2008) referred to this model as the “trait model” and indicated:

Numerous articles on emotional intelligence have proposed the existence of hitherto undiscovered mental abilities, competencies, and skills. The theory of trait emotional intelligence suggests that the content domains of these models invariably contain permutations of personality traits. (p. 635)

The personality model of EI expands the construct to contain a combination of several different traits. Bar-On and Parker (2000) indicated that some of these traits include assertiveness, self-regard, and empathy. This model was described by Hedlund and Sternberg (2000) as including everything except IQ. Bar-On's (2004) work falls into this category and he developed the term emotional quotient (EQ). He also developed the Emotional Quotient Inventory (EQ-i). Bar-On's work on the EQ-i model has received attention in academic, as well as popular press, arenas (Palser, 2004). Some indicated that the work of Bar-On has promise (Matthews & Zeidner, 2000). However, others indicated that the EQ-i does not measure something significantly different than personality, and that it measured components that were not ability-based (Mayer, Salovey, & Caruso, 2000).

In addition to the two areas of literature that included EI as Zeitgeist and EI as personality, there was a third area that conceptualized EI as mental ability. Mayer and Salovey, along with an additional colleague Caruso (1997), revised Mayer and Salovey's (1997) original definition of EI. EI was moving toward a conceptualization of a standardized intelligence in the work of these researchers (Mayer, 1999). Mayer and Salovey (1997) wrote a book entitled *Emotional Development and Emotional Intelligence*. In this text, the original definition was revised to include the four branches of EI: (a) the ability to perceive emotions, (b) the ability to access and generate emotions in order to facilitate thought, (c) the ability to understand emotions and emotional knowledge, and (d) the ability to regulate emotions to promote growth (i.e., both emotionally and intellectually). Matthews et al. (2002) stated that Mayer, Salovey, and Caruso were "putting the intelligence into EI" (p. 16), and this model was one of several available in the literature, including the Zeitgeist model, the trait or personality model, and the mental ability model.

Benson (2003) condensed the three conceptualizations of EI into two suggesting that the only alternatives are to view EI as a mixed model as Goleman did (based on Mayer, Salovey, and Caruso's research; Bradbury, Greaves, & Lencioni, 2005) or to subscribe to the ability based model as evidenced and promoted by the research of Mayer and Salovey (1997). For the purpose of this study, this researcher subscribes to the definition of EI as an ability as outlined by Mayer, Salovey, and Caruso (2002). The ability model is selected over the others because there is greater empirical evidence to support the ability-based model over the Zeitgeist model. Furthermore, when compared to the personality or mixed model, the ability-based model more closely aligns with an intelligence model. In addition, the method of measurement associated with the ability-based model is also ability-based similar to methods of measuring general intelligence.

### **Emotional Intelligence and Performance**

Many health care systems around the world are emphasizing a need for more patient centered care (T. Mayer & Cates, 1999). Patient-centered care is a multi-dimensional concept that addresses patients' needs for information, views the patient as a whole person, promotes concordance, and enhances the professional-patient relationship (Stewart, 2001). However, health care professionals vary in their ability to achieve an understanding of the patient perspective and provide patient-centered care (Britten, Stevenson, Barry, Barber, & Bradley, 2000). One possible explanation is that individual differences in the personal characteristics of professionals may account for at least some of this variation. Examination of the individual characteristics of health professionals and how they might relate to patient-centered care is a relatively new and under-explored approach. There seems to be no definitive answer as to how important any one such factor might be. There are many psychological approaches that might be

taken, including an examination of personality traits, the idea of multiple intelligences that address areas beyond standard IQ, and the study of attitudes and beliefs. Emotional intelligence (EI) is one such personal characteristic, and is increasingly referred to as having a potential role in medicine, nursing, and other health care professions. It is suggested that EI is important for effective practice, particularly with respect to delivering patient centered care (Bellack, 1999).

Most complaints about doctors relate to poor communication, not clinical competence, and improving communication in health care is a current area of interest in policy and practice. Given the emphasis on insights into one's own and others' emotions that are described by models of EI, it might be offered as an explanation for why some practitioners appear to be better at delivering patient-centered care than others (Howie et al., 1999). Assessing and discriminating patient's emotions could have an impact on the quality and accuracy of history taking and diagnosis. In addition, if clinicians are able to understand patients' emotional reactions to prescribed treatments or lifestyle advice they may be better able to understand why some treatments are more or less acceptable to some patients. The ability to manage and read emotions would seem to be an important skill for any health professional and might potentially enhance patient-centered care, improve the quality of the professional-patient relationship, and increase patient levels of satisfaction with care and perhaps even concordance.

### **Emotional Intelligence and Measurement**

In addition to the problems associated with definition or model of EI, another concern is the measurement of the construct. All research that is relevant to EI is dependent upon the appropriate measurement being utilized to examine the construct (Goldberg, Matheson, & Mantler, 2006). The literature on testing and measurement of EI can be conceptualized as two movements that number the conceptual debates: one seeks to measure EI as a component of

personality or a mixture of traits, while the other seeks to measure EI as a mental ability (Palser, 2004).

One method of measuring EI involves using the assessment developed by Bar-On and Parker (2000), the EQ-i. Bar-On and Parker have described the EQ-i as a self-report measure. Self-report measures have a variety of limitations associated with their use, one of which is poignantly illustrated by the title of Kruger and Dunning's (1999) article entitled "Unskilled and Unaware of It" in which they indicate that people tend to hold inflated views of their own competence in both emotional and intellectual domains. This finding was partially explained by a lack of metacognitive ability. In other words, there are two struggles present when skills are limited: one is the limited ability and the second is the lack of realization of one's competence level. They indicate that there is the "above average effect," which is defined as "the tendency of the average person to believe that he or she is above average, which is contrary to the reasoning behind descriptive statistics" (p. 122). Not only did Kruger and Dunning turn a critical eye toward self-report measures, but Davies, Stankov, and Roberts (1998) also critiqued self-report measures as not being unlike the measurement of personality, which indicated a lack of construct validity. Davies et al. were no respecters of models, as they also indicated that the ability-based construct of EI as defined in Salovey and Mayer's (1990) article overlapped to an extent with several components of personality. The views of the researchers associated with the trait or personality model and those associated with the ability-based model highlight the mixed reviews in the literature regarding the measurement of the construct of EI.

Goldberg et al. (2006) used an approach to measure and test treatment of EI as ability. They studied the validity of the MSCEIT and a self-report measure, the Self-Report EI Scale (SREIS) that was developed by Schutte et al. (1998). This self-report instrument contains 33

self-report items. The SREIS was validated in relationship to two models; one is the model that Salovey and Mayer (1990) initially developed (Schutte et al., 1998). They originally described EI as “the accurate appraisal and expression of emotions within oneself and others and the regulation of emotion in a way that enhances living” (Mayer, DiPaolo, & Salovey, 1990, p. 772). The SREIS validation was related to the Trait Meta Mood Scale (Salovey, Mayer, Goldman, Turvey & Palfai, 1995) and also involved some constructs more commonly associated with personality than intelligence such as alexithymia, optimism, and impulse control (Goldberg et al., 2006; Goleman, 1995).

The Multifactor EI Scale (MEIS) is the predecessor of the MSCEIT. Roberts, Zeidner, and Matthews (2001) indicated it assessed entirely different constructs because of the minimal overlap between the two scales. Researchers are cautioned from drawing conclusions on the MSCEIT based on the MEIS. Regarding the relationship between the self-report measure developed by Schutte et al. (1998) and the MSCEIT, Goldberg et al. (2006) found that “despite stemming from a common theoretical framework, in this study, these two measures, and their respective subscales, were at best weakly relate” (p. 41). This confirms what other researchers have shown and is consistent with additional studies that examine the relationship between self-report and ability based measures of EI (Barchard & Hakstian, 2004; Brackett & Mayer, 2003).

Despite coming from the same theoretical background regarding the definition of EI, researchers indicate the method of measuring EI is as important as the model of EI adopted (Matthews, Roberts, & Zeidner, 2004). Even if EI is defined consistently, if it is measured with self-report rather than with an ability-based test, that may alter what is being measured. Therefore, if the construct of EI is being conceptualized as an intellectual ability, as the name infers, it is necessary to employ an ability-based assessment methodology. This cogent

(Goldberg et al., 2006) argument is highlighted by the previously mentioned concept of lacking skill and not being aware of the lack as evidenced by the work of Kruger and Dunning (1999). In addition, this concept applies specifically to IQ. Goldberg et al. (2006) indicated in reference to comparing the ability-based MSCEIT model and the SREIS “the finding that on average self-reported EI scores were fairly high in this study, whereas the performance based scores were moderately low, suggests that participants may have been overestimating their emotional abilities” (p. 42). This is consistent with aforementioned literature on self-report and ability-based instruments. This study would embrace the ability-based model that Mayer, Salovey, and Caruso (2002) introduced and employ an ability-based measurement, the most recent version of Mayer, Salovey, and Caruso’s (2002) instrument, the MSCEIT.

The ability-based model is the most widely supported by empirical studies, is most similar to general intelligence, has a measurement instrument that is consistent with its definition, and provides the clearest and most cohesive definition. After Mayer and Salovey (1997) revamped their original definition, they adopted a strict ability-based model. Therefore, for the purpose of this study, EI would be conceptualized and measured using the ability-based model developed by Mayer and Salovey (1997).

### **Residential Treatment Client Outcomes**

The phenomenon of AMA discharge is fairly common on general medical and psychiatric units. Patients from substance-abuse populations are particularly prone to leaving treatment AMA (Armenian, Chutuape, & Stitzer, 1999, Beck, Shekim, Fraps, Borgmeyer, & Witt, 1983). Jeremiah, O’Sullivan, and Stein (1995) reported that patients who leave AMA are more likely to be readmitted and to have poorer outcomes (relapse rates) than patients who complete their prescribed treatments. Identifying the factors that motivate patients to sign out AMA could be of

great assistance in designing interventions and strategies to discourage patients from leaving their treatments prematurely. Such identification could facilitate the continuity of inpatient treatment and enhance aftercare compliance. A retrospective study was conducted at the Philadelphia Veterans Administration Medical Center (VAMC) to identify some of the reasons patients gave for termination of treatment against medical advice. Admission and discharge data from 11/12/98 to 8/5/99 (7 months) were collected from the inpatient detoxification/dual diagnosis unit. These admissions were referred from either the hospital's central intake unit or from the ER (emergency department). A majority of the patients admitted were depressed. In addition, a high percentage of these depressed patients also had suicidal ideation due to situational or emotional crisis and psychiatric instability. In addition to the psychopathy, some of these admissions were also for substance use, intoxication, and unsuitability for outpatient detoxification. The average length of stay on the unit was six to seven days, after which patients were referred to an ambulatory aftercare program or to an extended inpatient program at another facility. When a patient requested an AMA discharge, nurses completed a form that required them to ask the patient his or her reason(s) for wanting to leave AMA.

The rate of "irregular" discharge has been widely reported in reviews of the literature. Depending upon the treatment setting, patient population, and how irregular discharge was defined, the data showed that irregular discharge was sometimes differentiated between AMA, administrative, disciplinary, and elopement. AMA discharge rates range from 16.8% (Berg & Dhopes, 1996) and 23.5% (Armenian et al., 1999), to 50% on short-term hospital detoxification units (Endicot & Watson, 1994). Greenberg, Otero, and Villanueva (1994) reported rates of 19.3% in a Dual Diagnosis unit, whereas inpatient general medical service units reported rates of 2.2% (Jeremiah et al., 1995). Greenberg et al. (1994) found significant association of AMA

discharges to diagnosis of antisocial personality disorders within younger age groups. Although a *DSM-IV* diagnosis of antisocial personality disorder was not captured for our patients, an overview of general characteristics as assessed by the clinical staff noted a high incidence of antisocial personality behaviors. Armenian et al. (1999) also found that AMA discharges were associated with younger age and shorter history of cocaine use. De los Cobos, Trujols, Ribalta, and Casas (1997) reported a high association between AMA discharges and fewer lifetime months of abstinence prior to hospitalization, to having cocaine positive urine at intake, and being single. Greenberg et al. (1994) found that sex, ethnicity, marital status, religion, employment, education, living circumstances, and number of substances abused were not predictive of discharge type. We did not replicate his findings due to the small number of subjects in this study and the dual diagnosis of substances used. Armenian et al. (1999) further reported higher AMA discharge rates in opiate dependent patients who were detoxified with clonidine. At the VA inpatient unit, methadone is routinely used as the principal agent for opiate detoxification. Clonidine is seldom used in this manner. However, our experience mirrors Armenian et al.'s in that, rarely, patients who are started on clonidine alone for detoxification almost always leave AMA.

Clinical providers also report that most patients who leave AMA are characteristically impulsive. In a previously reported study by Berg and Dhopes (1996), it was noted that unscheduled admissions had higher rates of AMA discharges than scheduled admissions. Many patients seeking drug addiction treatment were motivated to such treatment while experiencing acute emotional and situational crisis. However, once the crisis was resolved, and a form of stability returned, patients lost their motivation to continue treatment and signed out impulsively. Philips and Ali (1983) reported in a similar study that patients left AMA citing reasons of

personal and financial obligations and feeling better. Similarly, two-thirds of our AMA discharged patients gave reasons for leaving as personal business. This included family problems such as sudden sickness or death in the family, reconciliation with spouse or girlfriend, and legal problems (court dates). A patient's need to leave regarding the expectation of receiving a check was not uncommon.

### **History of Addiction**

Humans first discovered psychoactive drugs accidentally in prehistoric times. These were mind-altering plants and fruits, no doubt used to cope with their harsh existence and environments (Inaba & Cohen, 2004). This first use of drugs in combination with the vulnerability of brain chemistry marks the beginnings of drug abuse. Treatment was to come much, much later. Wine, ancient versions of beer, opium, peyote, belladonna mushrooms, tobacco, cannabis, coffee, tea, and distilled alcohol were used medicinally and spiritually throughout history. Technological advances, morphine from opium, injection needles, and more advanced transportation systems have influenced the availability and use of drugs. With the availability of drugs came abuse. Prescription drug abuse has been described as an epidemic (National Institute on Drug Abuse [NIDA], 2011) with an estimated 6.8 million current prescription drug abusers—including 4.9 million abusing prescription pain relievers. Among those who report recently initiating illicit use of any drug, 26% report starting with illicit use of a prescription drug. This represents approximately 2.4 million new prescription drug abusers each year, or an average of 6,700 each day (NIDA, 2011).

History is witness to temperance movements and prohibitions. Synthetic drugs, designer drugs, and highly concentrated forms of drugs from the past are now more readily available. Illicit drugs are big business. Men have found means of introducing drugs to their brains in

methods never thought of in days of old. It felt good to use illicit drugs, if only once. Humans like to feel good (Inaba & Cohen, 2004). Prior to the mid-20th century, alcoholics and drug addicts, if treated at all, were delegated to asylums later referred to as state mental hospitals (Inaba & Cohen, 2004). Alcoholics were to remain there until they were cured. Prior to this period, alcoholics would find themselves in prisons and cemeteries, as well as, asylums. It would appear that alcoholics still find themselves in the same places; some things never change (Inaba & Cohen, 2004).

With the publication of Alcoholics Anonymous (AA, 1939) and the beginning of the 12-step self-help meetings, a new disease concept was postulated. In 1949, Hazelden, a not-for-profit alcohol addiction treatment center began to develop a treatment program now known as the Minnesota Model, used for alcohol and other substance abuse. Another model, the social model, emphasized peer support, client empowerment, blurring the distinctions between staff and clients, and use of AA 12-step, self-help meetings. Phoenix House, a therapeutic community (TC) program, was formed in 1967 when six heroin addicts joined together at a detox hospital in New York to keep each other clean (Besteman, 1992). Synanon of San Francisco fame was also a therapeutic community. The distinction of Synanon was that staff were all nonprofessional ex-addicts. Treatment at Synanon was highly structured and harsh (Besteman, 1992). The common components of these TC treatments are self-help meetings, individual counseling, group therapy, family therapy, behavior modification, or social learning (Besteman, 1992). Classroom instruction would normally be part of the treatment, discussing anger management, relapse prevention, parenting skills, health issues, and social living skills. There are varying degrees of structure, and a work component may be an integral part of the treatment (Besteman, 1992).

## Common Components of Treatment

The cornerstone in effective treatment of alcohol and other drug (AOD) abuse is not picking up another drink of alcohol or an illicit drug. In some cases the goal of treatment is complete abstinence and in others the goal is a reduction in use. Successful outcomes are directly dependent on not having a relapse or, more recently, referred to as a lapse. According to Marlatt and Gordon (1985), the relapse process is more than just the first drink after treatment. This model states that the relapse process begins before the first post treatment alcohol use and continues after the initial use. This conceptualization allows for additional interventions into the process to prevent or reduce relapse episodes and therefore improved outcomes (Larimer, Palmer, & Marlatt, 1999). Specifically, Marlatt and Gordon (1985) stated that:

Relapse Prevention (RP) is a generic term that refers to a wide range of strategies designed to prevent relapse in the area of addictive behavior change. The primary focus of RP is on the crucial issue of maintenance in the habit-change process. The purpose is twofold: to prevent the occurrence of initial lapses after one has embarked on a program of habit change, and/or to prevent any lapse from escalating into a total relapse. (p. 30)

More traditional attitudes on relapse considered relapse as an end stage, an all or nothing situation, a success or a failure juncture. The RP model sees relapse as a continuing process that is amenable to intervention and training to enhance the successful outcome of AOD abuse treatment. The origins of this model rest in the theoretical basis of social learning theory (Bandura, 1984). Knowing not to drink alcohol or use illicit drugs is simple, too simple. Post treatment success requires components of cognitive, social, and behavioral skills, organized into integrated courses of action to serve the purpose of relapse prevention (Larimer et al., 1999). From this skill set the self-efficacy of successful relapse prevention increases the relapse prevention skills. Success increases success.

Marlatt (1996) provided a detailed classification system or taxonomy of factors or situations that may precipitate a relapse episode. These are divided into two categories, immediate determinants and covert antecedents. Immediate determinants include high-risk situations, a person's coping skills, outcome expectancies, and the abstinence violation effect. Covert antecedents include lifestyle imbalances and urges and cravings (Larimer et al., 1999). According to the RP model, continued abstinence after an initial change in behavior should increase self-efficacy or mastery over the old behavior and thus act to increase the likelihood of this abstinent behavior to continue (Larimer et al., 1999). A high-risk situation may pose a challenge to this new behavior. The high-risk situations may be negative emotional states, such as anger, or depression; or situations that involve another person, a quarrel with a family member; or social pressure, being around others who are drinking; or positive emotional states, such as celebrations. These are the immediate high-risk triggers but it is the response to these that determine whether a lapse or longer relapse is to occur.

This RP therapy provides knowledge in identifying high-risk situations and how to avoid them, if possible (Larimer et al., 1999). Coping is the skill set that deals appropriately with the high-risk situations. The person who can employ coping skills effectively has a twofold boost in positive behavior (Rawson, Obert, McCann, & Marinelli-Casey, 1993). The successful coping decreases the risk of lapse and increases self-efficacy, which, in turn, acts to increase this same positive behavior in the future. The person is learning successful relapse prevention. Coping skills are discussed in therapy, and role-playing or homework is assigned to assist in identifying the individual's need for coping skills. Learning how to say "No" when offered a drink or exercising instead of going to "happy hour" becomes the logical thing to do. New cognitive skills such as thought-stopping are important intervention strategies (Rawson et al., 1993).

Outcome expectancies are an immediate determinant factor in relapse (Rawson et al., 1993). The person's expectation of the immediate effect of taking a drink affects the ability to not take the first drink. The person in recovery is thinking only of the immediate, not the longer delayed, effect of taking the first drink. "I think I'll have a cocktail with dinner and then go to the hospital." Alcohol and illicit drugs are effective in temporarily reducing stress or anxiety. Relapse Prevention Therapy (RPT) deals with these notions (Rawson et al., 1993).

Whether a lapse in abstinence is just a short-term lapse or a return to full-blown, relapse is described as the abstinence violation effect (Rawson et al., 1993). There is a critical phase between a lapse after abstinence and abandonment of the abstinence goal. How a person perceives the lapse, as a personal failure or as an inability to cope effectively, will make the difference in abandonment of the goal or learning additional coping skills for future use (Rawson et al., 1993). Covert antecedents include lifestyle imbalances and urges and cravings (Marlatt & Dimeff, 1998). Lifestyle balance refers to the degree of equilibrium that exists in one's daily life between perceived external demands ("shoulds") and perceived desires ("wants"). Increased imbalance leads to increased risk of relapse (Marlatt & Dimeff, 1998). Pleasurable activities can increase lifestyle balance and lessen the stress of daily life. Positive activities reduce the possibility of rationalizing negative activities and promote balance. RPT addresses all of these components.

### **Individualized Drug Addiction Counselor**

The addiction counselor, generally a paraprofessional, is at some stage of recovery as well. Since 1967, California certification programs have developed educational and work experience requirements for credentials and certifications (NIDA, 1989). The addiction counselor focuses on the client in individual and group counseling settings, both residential and

day programs. In addition to working with the addictive process, the counselor works with the clients in many related problem areas, such as employment status, legal/illegal involvements, and family or social issues (NIDA, 1989). Addiction counseling is instrumental in the ongoing program of recovery with the client. The time limited and intense nature of the process focuses on behavioral change, an introduction and acceptance of 12-step principles, and ongoing tools for recovery. The many areas of life in conflict and resolving these are the subjects of counseling (NIDA, 2000).

The goal of the addiction counselor is to help the client obtain and retain abstinence from addictive chemicals and behaviors (NIDA, 2000). A secondary goal is to help the client re-establish his or her life and relationships that may have been damaged by the addictive behaviors. This is accomplished by assisting the client to recognize the existence of the problem and the abnormal thought processes that accompany drug abuse or dependence (NIDA, 1989). The goals of abstinence or reduced use of alcohol and drugs is clearly defined and agreed to. Generally absolute abstinence is the goal but positive outcomes may be measured in reduction of use or other criteria such as days worked, or less legal involvement, or other criteria. The role of 12-step, self-help programs is a topic of individual counseling (NIDA, 2000). The counselor introduces the concepts of 12-step programs and sees that the client has all the information and encouragement to attend a minimum number of meetings weekly. In many circumstances, attendance is a requirement for the client. Sponsorship in 12-step programs is explained by the counselor, and the client is encouraged to obtain an outside sponsor. Various options of self-help programs are explained, including those legitimate self-help programs that are not spiritually based.

The counselor may find resistance in assisting a client to attend and make use of 12-step programs. Because of the easy access and long-term nature of 12-step, self-help groups, it is critical that the client be convinced of the efficacy of them. The counselor may act as a consultant, not a sponsor, in the actual “12 steps” the client will take. Areas of personal inventory, character defects, and spirituality may be topics of individual counseling. It is very important that the addiction counselor is well versed in 12-step programs (NIDA, 2000). Individualized addiction counseling may be provided as part of a residential program or solely outpatient. Taxman and Bouffard (2003) observed that drug treatment counselors varied in terms of the content of their sessions with a tendency to cover a broad range of topics. Counselors also did not have a strong affiliation for any one model that defined their treatment approaches. Specifically, this study illustrated that counselors have different beliefs, philosophies, and levels of knowledge of addiction. Taxman and Bouffard concluded that skill development in the counselor should be a focal point of treatment programs.

### **Predictors of Substance Abuse Treatment Outcome**

Multiple studies (Anglin & Hser, 1990; Chou, Hser, & Anglin, 1998) examined relationships among client variables, such as demographic and substance-related information, and retention rates for specific treatment programs. Two characteristics appear to be reliably associated with higher rates of retention or program completion; fewer drug and alcohol-related problems (Anglin & Hser, 1990; Chou et al., 1998); and more favorable employment status (Anglin & Hser, 1990). Studies using reduction in substance use as an outcome measure also identified greater social support as predictive of better outcomes (Condelli & Hubbard, 1994). However, demographic characteristics may demonstrate inconsistencies with treatment outcome. For example, a study found females drop out of treatment more often than males (Anglin, Hser,

& Booth, 1987). Other researchers have found males to be at greater risk for dropout (Chou et al., 1998) whereas Wickizer et al. (1994) found no association between gender and treatment completion. To investigate the impact of childhood abuse on treatment outcome, Gutierrez and Todd (1997) assessed the prevalence of reported emotional, physical, and sexual abuse among male/female drug-using clients in residential drug treatment programs. They found that reported abuse was not related to treatment completion. However, gender was related and females, in general, were less likely than males to finish treatment with a positive prognosis for abstinence and were also less likely than males to stay in treatment for the required number of days (Gutierrez & Todd, 1997).

Treatment completion and dropout rate are difficult to assess given the vast differences in program criteria and treatment modalities. For example, Mueller (1995) reviewed a voucher-based approach for cocaine abuse. He found that 90% of participants in the voucher-based program completed a 12-week treatment program, compared to 65% in the no-voucher group. In addition, he found that over a 24-week period 75% of the voucher group, versus 40% in the no-voucher group, completed treatment. In contrast, Klein, di Maleza, Arfken, and Schuster (2002) examined differences in demographics and substance-related problems in populations admitted to three substance abuse treatment settings (outpatient, intensive outpatient, and residential). They tested whether interactions between client characteristics and types of settings predicted rates of 30-day retention and treatment completion. The researchers found that clients were most likely to complete treatment in intensive outpatient settings and least likely to complete treatment in outpatient facilities. Females and clients with more serious drug-related problems were also less likely to complete substance abuse treatment.

Furthermore, males had higher completion rates than females in all treatment settings (inpatient, outpatient, or residential), although the difference was most profound in intensive settings (Klein et al., 2002). Klein et al. also demonstrated that ethnicity had little effect on retention in residential settings. In another study, Scott-Lennox, Rose, Bohlig and Lennox (2000) examined the role of family status and demographic characteristics in an attempt to explain the approximate 60% dropout rate for females in substance abuse treatment. Data collected between 1996 and 1997 found that the likelihood of not completing treatment was greatest for pregnant African American females who had custody of minor children, or were younger than age 21. However, African American females who had children in foster care were more likely to complete treatment. They also found that having fewer children increased the probability of women staying in treatment longer, even among those who relapsed during treatment (Scott-Lennox et al., 2000). There is evidence that female-only treatment programs can be more effective and have higher rates of completion. Grella (1999) found that females in female-only treatment were more than twice as likely to complete a substance abuse treatment as women in mixed-gender programs. She also found that most of the participants were more likely to be younger, pregnant, and homeless. Grella concluded that if the treatment environment is focused on the special needs of female substance abusers, females, who otherwise are at a greater risk of dropping out, can complete treatment at higher rates (Grella, 1999).

One of the obstacles that may deter women with small children from seeking treatment for substance abuse is the fact that if they enter a substance abuse treatment program they may put themselves in jeopardy of losing custody of their children (Woodside, 1991). For many states, habitual or addictive use of alcohol or drugs can be used as evidence of child abuse and neglect. Despite changes in state policies, separation of families when parents enter substance

abuse treatment is likely. According to Woodside (1991), it is presumed that many substance abusers will engage in child abuse and or child neglect prior to treatment. Parental substance abuse has been recognized as a significant factor in many cases of child abuse and neglect. Mumm, Olsen, and Allen (1998) estimated that 50-80% of all child abuse and neglect cases substantiated by child protective services involve some degree of substance abuse by the child's parents.

As a result, assessment and frequent placement of dependent children with other family members, or in foster care settings, particularly for single mothers who abuse alcohol or drugs is eminent (Woodside, 1991). The law's tragic effect is that children whose mothers' abuse substances are subject to permanent removal from their families as a result of their parent's efforts to recover from addiction. Instead of strengthening and keeping families together, the law serves to tear families apart (Woodside, 1991).

Although there is no consensus on whether or not specific features of a treatment program significantly improve client retention (Simpson, Joe, Rowan-Szal, & Greener, 1995; Sweet & Noones, 1989), there are several client-related variables shown to relate to lack of treatment engagement. In terms of socioeconomic and drug-related client variables, early drop-out has been shown in clients with current unemployment, lower education level, history of arrests, longer drug use histories, cocaine abuse, and greater previous treatments (Brower, Mudd, Blow, Young, & Hill, 1994; Claus, Kindleberger, & Dugan, 2002; Gainey, Wells, Hawkins, & Catalano, 1993; McKay, Stoewe, McCadam, & Gonzales., 1998; Stark, 1992). Further, client-related psychological and attitudinal variables, such as lower perception of treatment benefits (Florentine, Nakashima, & Anglin, 1999), depression and avoidance coping (Kohn, Mertens, & Weisner, 2002), and lack of social support (McMahon, Kouzekanani, & Malow, 1999) have been

shown to relate to lack of retention. Results are mixed in terms of gender and racial/ethnic factors, with some studies showing poorer treatment participation and retention in women and/or African American clients (Mertens & Weisner, 2000), but other studies finding no differences (McCance-Katz, Carroll, & Rounsaville, 1999). Other potentially important client-related factors have not been fully examined for prediction to treatment drop-out.

For example, although chemically dependent clients are referred to treatment through various mechanisms, their referral source has not been systematically examined as a predictor of success or failure. Clients with current ongoing relationships with other providers (e.g., primary care physician) may be more likely to engage in treatment with an addiction provider, but this has not been systematically examined. One important advantage to identifying clients at risk for early drop-out may be to effectively triage or place such clients in appropriate or targeted programs, rather than a “one size fits all” approach. Although studies have not demonstrated a unitary set of client-related factors predictive of retention, as mentioned, several general background factors have been shown to relate to treatment drop-out. However, the ability to extrapolate these findings to practicing clinics in the “real world” is hampered because these studies have been largely conducted in circumscribed client samples enrolled in structured group-based treatment within the context of community mental health centers, residential settings, post-intensive treatment, or homeless shelters (Arfken, Klein, Di Menza, & Schuster, 2001).

### **Counselor Impact on Treatment**

Psychotherapy and counseling are generally recognized as effective treatment for patients with substance use disorders (Pickens & Fletcher, 2001). Indeed, 97-99% of drug and alcohol treatment programs offer some form of psychotherapy or counseling (Fletcher & Hubbard,

2002). Nevertheless, the role of the counselor in the treatment of substance use disorders has received little research attention (Onken & Blaine, 2000). According to Imhof , Hirsch, & Terenzi (1984)., all major (treatment) reviews consistently omit the role of the counselor, focusing almost exclusively on differences in treatment techniques or patient variables. However, several authors have suggested that the therapist may be one of the most important factors in effective psychotherapy for patients with substance use disorders (Imhof, 1991). In the general literature on psychotherapy research, counselors have shown wide-ranging differences in effectiveness and patient outcome has been found to be more highly related to therapists' skill than to their theoretical orientation (Lambert & Ogles, 2004).

Differences among therapists who treat substance use disorder patients may be even greater than among therapists in general. Cartwright (2001) has observed that variations are typically greater among therapists who work with more difficult patient populations; patients with substance use disorders, on the whole, have greater difficulty than many other patients in life functioning (in areas such as family, employment, legal, and housing and health problems associated with addiction). The phenomenon of patients dropping out of treatment prematurely is a common occurrence in psychotherapy in general, and is even more prevalent in drug and alcohol treatment programs (Craig, 2005). Numerous studies have been conducted on dropout rates for counselors working with substance use disorder populations. Reports showed wide-ranging therapist differences, an absence of baseline patient variables that could account for the differential therapist effects observed, and relatively homogeneous therapist professional backgrounds (Craig, 2005).

Two early studies of this type were conducted at Boston City Hospital, one on inpatients and the other on outpatients. Raynes and Patch (2001) found that patients with substance use

disorders were more likely to leave treatment prematurely (either against medical advice [AMA] or without leave [AWOL]), than other diagnostic groups. Moreover, AWOL rates among eight psychiatric residents studied during a one-year period ranged from 0 to 40% per resident. Two residents in particular had significantly more AWOL patients than the others. Patient socio-demographic characteristics were not related to AMA or AWOL status. The authors concluded, “The resident appears to have a direct influence on this type of discharge, communicating his wish for noninvolvement with the patient, probably due to attitudes and countertransference problems” (Raynes & Patch, 2001, p. 478). Rosenberg, Gerrein, Monhar, and Robinson (2006) evaluated 16 alcohol counselors at Boston City Hospital, also during a one-year period. They found that counselors’ average patient attendance rates ranged from 27 to 67% during 18 weeks of treatment. As early as nine weeks into treatment, a significant difference in dropout rate could be found among counselors. Neither patient variables nor completion of a one year training program by the counselor affected retention rate.

### **Ethnicity and Treatment Outcomes**

According to Messer, Clark, and Martin (1996), African American females were more likely to enter treatment than were females of other races. In addition, they were more likely to no show for treatment after intake and discontinue their treatment prematurely. This suggests that, once they enter treatment, the needs of African American females may not be adequately addressed. Because African American females are more likely to have their children at a younger age, they may enter a treatment system with more dependent children. Messer et al. (1996) also found that as the number of children increases so did the likelihood that such females would not complete their treatment and that females who had children in foster care were more likely to complete treatment. In addition, they found that having fewer children increased the

probability of females remaining in treatment longer (Scott-Lennox, Rose, Bohlig, & Lennox, 2000). Angeriou and Daley (1997) suggested that the type of treatment setting may determine treatment completion. For example, African Americans report a preference for residential treatment, whereas European American and Mexican American clients prefer outpatient care.

According to Wu, Kouzis, and Schlenger (2003), extensive sociological literature exists to provide evidence of the association between social environment and problematic substance use, especially among African Americans. They link problematic substance use to African Americans' change in attitude toward and access to alcohol and other drugs after relocating from the rural South to urban cities (both northern and southern) and after joining the military. They hold that, historically, rural southern African Americans drank alcohol primarily during celebrations such as weddings and holidays. However, their substance use increased when they encountered greater access to alcohol and other drugs along with social acceptance of casual and more frequent substance use in their new living environments (Wu et al., 2003). Rounds-Bryant, Motivans, and Pelissier (2003) conducted a study to address the gap in the literature by describing and comparing the background characteristics and pre-incarceration behaviors and social environments of adult African American, Hispanic, and European American substance abusers who were treated in residential drug abuse treatment programs. Their results indicated that African Americans were younger, less educated, less likely to be legally employed prior to incarceration, and more likely to meet diagnostic criteria for antisocial personality disorder, but less likely to meet criteria for a diagnosis of depression.

According to the National Institute on Drug Abuse (NIDA, 2002), European Americans were more likely than any other racial/ethnic group to report current use of alcohol in 2002. An estimated 55% of European Americans reported substance use in the past month. Wu et al.

(2003) found that European American males were estimated to be three times more likely than Hispanic or African American males to utilize substance abuse services. The abuse of prescription drugs is also more popular among European Americans. Zickler (2001) stated that the number of people who abuse prescription drugs each year roughly equals the number who abuse cocaine (approximately 2 to 4% of the population). European Americans are more likely than other racial or ethnic groups to abuse prescription drugs. Many substance abusers also have psychiatric disorders. Compton et al. (2000) indicated that minority substance abusers tend to have fewer psychiatric problems than their European American counterparts. Additionally, European American substance abusers typically identified as being more likely to report current or lifetime depression and anxiety than minority substance abusers. Individuals between the ages of 18 to 25 are more likely than persons in other age groups to begin abusing prescription drugs. Girls between the ages of 12 and 17 are more likely than boys to begin prescription drug abuse and are more likely to abuse stimulants and sedatives than other prescription drugs (Zickler, 2001). In their study of background characteristics of substance abusers, Rounds-Bryant et al. (2003) found that European American substance abusing participants were different than African American participants in their self-reported family background history. European American participants were more likely to have a family background characterized by divorced parents, working fathers, immediate family members with alcohol problems, and having experienced physical abuse before the age of 18 (Rounds-Bryant et al., 2003).

According to NIDA (2002), 42.9% of Mexican Americans reported alcohol use. Among these alcohol drinkers, 25.2% reported being binge drinkers. Rounds-Bryant et al. (2003) indicated that Mexican American clients from a community-based alcohol treatment program were more likely than European American clients to use drugs in combination with alcohol. In

reference to specific substances, researchers consistently found that both African Americans and Mexican Americans were more likely than European American substance abusers to use cocaine in connection with alcohol. European American substance abusers, however, were found to be more likely than other groups to report use a combination of alcohol and marijuana (Compton et al., 2000; Rounds-Bryant et al., 2003). In addition, Rounds-Bryant et al. found that Mexican American participants were distinguished from other groups by higher proportions who were incarcerated for a drug offense, and by a lower proportion who reported divorced parents, working mothers, daily drug or alcohol use, and prior drug treatment. In addition, they were more likely to die, suffer from severe drug-related illnesses, receive inadequate substance abuse treatment, and be involved in disputes and crimes (National Institute of Health, 1999).

### **Gender Differences and Treatment Outcome**

Until recently substance abuse treatment was oriented primarily toward males. According to NIDA (2002), however, females who seek substance abuse treatment are greatly increasing. In the year 1992, 28% of individuals who obtained substance abuse treatment were females compared to 30% in 2002 (NIDA, 2002). Because of the rise in utilization by women, treatment centers have begun to accommodate and provide more specific treatment that is geared towards females (Grella, 1999). Grella indicated that females tend to seek treatment for substance abuse, earlier in the course of their substance abuse usage than males. Females reported receiving less emotional support from their intimate partners and family members. Substance abusing females tend to be less involved in criminal activity but are more likely to be referred by social services (Sklar, Annis, & Turner, 1999). In addition, because of the financial burden and chaotic family status (they are younger, poorer, and more likely to have children) nearly 60% of females drop out of substance abuse treatment (Scott-Lennox et al., 2000).

The implementation of gender-specific programs has increased within the past several years. McCormish, Greenberg, Ager, and Essenmacher (2003) studied the outcome of three family-oriented-specific programs. All programs were geared towards substance abusing females and their children. Even though these programs were relatively new, McCormish et al. found significant changes in treatment outcomes and family relationships. Findings indicated that 50% of the participants stayed in the program for 16 out of 24 months. These results contribute to the evidence that gender-specific programs that allow children on site may improve retention in treatment of pregnant and parenting females.

Males make up about 70% of individuals in substance abuse treatment programs. Male treatment seekers are more likely than females to receive treatment for an alcohol or illicit drug problem (2.1% males vs. 0.9%, females; NIDA, 2002). Males are more likely to be involved in criminal activity and/or on parole when they seek treatment (Sklar et al., 1999). In addition, according to Grella (2003), substance abusing males are more likely to have externalizing problems such as antisocial behaviors, and histories of conduct problems in childhood. Substance abuse affects males significantly more than their female counterparts. According to the National Institute of Health (1999), there is growing evidence that the effects of drug use and addiction do not always affect men and women in the same manner. The rate of any drug use among men is nearly twice that of women (8.1% vs. 4.2%, respectively). Data also suggest that for several illicit drugs, females may proceed more rapidly to drug dependence than do males, which may have to do with the way the body responds to drugs (National Institute of Health, 1999). According to NIDA (2000), males are more likely than females to have opportunities to use drugs; however, males and females, given similar opportunities for initial drug usage, are equally as likely to do so and to progress from initial use to addiction at similar rates. Females

and males appear to differ, however, in their vulnerability to some drugs. Both are equally likely to become addicted to or dependent on cocaine, heroin, hallucinogens, tobacco, and inhalants, but females are more likely than males to become addicted to, or dependent on, sedatives and anti-anxiety drugs, and less likely than males to abuse alcohol and marijuana (NIDA, 2000).

### **Age Differences and Treatment Outcome**

Age has been found to be another factor influencing substance treatment completion and dropout rate. According to Scott-Lennox et al. (2000), younger individuals (18-25 years old) were less likely than older substance abusers to complete outpatient treatment. In addition, younger individuals may be less motivated to seek treatment and stay off drugs for several reasons. A younger individual may have less support from their peers to complete treatment, may be more likely to be involved with a partner who is abusing drugs, may not think that their substance abuse problem is serious enough to warrant treatment, or may not be emotionally and psychologically ready for substance abuse treatment. In addition, for younger females, it is even more likely that they will have young children who require constant care, which can undermine the young mothers' abilities to pursue treatment options (Scott-Lennox et al., 2000).

Several influential factors can impact treatment completion for older substance abusers. The factors include personal characteristics, life context, and history of treatment (Brennan & Moos, 1996). Some of the personal characteristics that influence substance abuse among older adults include demographics such as gender and ethnicity, history of substance abuse and coping strategies to manage stressors, their neighborhood and home environment, social and financial resources, emotional support, interpersonal relationships (friends and family) and personal health (Brennan & Moos, 1996). Other factors that influence treatment completion include history of substance abuse treatment, experiences with substance abuse and treatment seeking, and specific

treatment program characteristics. Together, these factors shape an older person's substance abusing behavior (Brennan & Moos, 1996).

### **Length of Stay and Completion of Treatment Program**

The NIDA (1999) has long asserted that treatment effectiveness must be looked at in a holistic way. In fact, NIDA's fifth principle in the Principles of Drug Addiction Treatment is: Remaining in treatment for an adequate period of time is critical for treatment effectiveness. Research indicates that for most patients, the threshold of significant improvement is reached at about 3 months in treatment. After this threshold is reached, additional treatment can produce further progress toward recovery. Because people often leave treatment prematurely, programs should include strategies to engage and keep patients in treatment. Another assertion of NIDA, relates to its 10th principle: "treatment does not need to be voluntary to be effective" (p. 2). "Many factors may relate to successful completion including sanctions or enticements in the family, employment setting, or criminal justice system" (p. 2). Obtaining treatment and continued retention in treatment are all predictors of successful treatment (NIDA, 1989). In other words, positive outcomes are reflective of length of stay in a substance abuse treatment program.

The Drug Abuse Treatment Outcome Study (DATOS) collected 1-year follow-up outcomes for 2,966 clients in outpatient methadone (OMT), long-term residential (LTR), outpatient drug-free (ODF), and short-term inpatient (STI) programs in 1991-1993 (Hubbard, Craddock, Flynn, Anderson, & Etheridge, 1997). According to Leshner (1997), the goal of DATOS was to determine the outcome of drug abuse treatment delivered in typical, stable programs. More than 10,000 patients at admission to treatment in nearly 100 programs in 11 cities nationwide were included. The DATOS researchers also interviewed a sample of nearly

3,000 patients 12 months after treatment. The potential for analysis included characterizing existing types of drug abuse treatment and describing current treatment populations in terms of drug use patterns, demographics, and other useful characteristics. “However, the primary value of DATOS is to tell us about the effectiveness of drug abuse treatment as it is currently delivered” (Leshner, 1997, p. 211). The most important finding of DATOS is that patients who enter substance abuse treatment do significantly reduce their illicit drug use.

Furthermore, clients with treatment durations of more than 3 months reported less prevalence of use and greater rates of reduction in use of illicit drugs (Hubbard et al., 1997; Leshner, 1997). The DATOS findings provide evidence that treatment of sufficient duration improves the odds of change in drug use. Leshner warned that as more public entities embrace managed care and other health care reforms, there will be reduced access to treatment, reduced duration of treatment, and fewer available services to patients admitted for treatment. Leshner stated that the reduced duration of treatment will produce less positive outcomes. The challenge is to identify what works in the shortest amount of time. In another analysis of DATOS, Simpson, Joe, and Brown (1997) stated that for clients to benefit from treatment, they must participate for a sufficient period of time in the therapeutic process. Length of stay has been widely used as a convenient, even though imperfect, index of this process. Simpson et al. found that several indicators of the treatment process (client and counselor relations, range of services delivered, and consumer satisfaction ratings) are related directly to program retention. Also related to retention is the notion that all treatment programs are unique and different, even those with similar therapeutic philosophies. Treatment centers operate differently based upon many criteria including management styles, physical plant, staff skills, funding, and client demands.

Simpson et al. concluded that these other factors must be considered in looking at length of stay in treatment or completion of a program of treatment.

### **Length of Stay and Outcomes**

The relationship between length of stay and positive outcome is also influenced by the state of the patient when he or she enters substance abuse treatment. Specifically, Fals-Stewart and Lucente (1994) found that severe cognitive dysfunction and antisocial personality qualities often increased length of stay but did not necessarily relate to a more successful outcome. Co-occurring psychiatric diagnoses in Latinos were investigated in a long-term residential treatment facility and it was found that reasons for dropping out of treatment were similar to those for non-Latinos (Amodeo, Chassler, Oettinger, Labiosa, & Lundgren, 2008). In this research, those individuals self-reporting a psychiatric dysfunction were 81% less likely to complete the program. Individuals using drugs in the 3 months prior to entry were in the shorter stay group whereas those who lived in institutions prior to entry were in the longer stay group. This research points out the importance of studying the lengths of stay in treatment (Amodeo et al., 2008). Connors, Grant, Crone, and Whiteside-Mansell (2006) examined the impact of length of stay in treatment on 305 women enrolled in a comprehensive residential substance abuse treatment program. Client outcomes were examined in an effort to show that positive changes in the mothers may be at least partially attributable to the treatment program. If treatment had positive impacts, then clients who received a greater dose should perform better. “Although causal statements are not appropriate, evidence of a dose effect would suggest potential treatment impacts” (Connors et al., p. 454).

Jonkman, McCarty, Harwood, Normand, and Caspi (2005) conducted a study on length of stay in 20 publicly funded detoxification centers in Massachusetts. Jonkman et al. found that

program size had the most influence on the mean adjusted length of stay. Is higher need of beds influencing faster turnover or is lower need of beds increasing length of stay? These questions were posed with no evidence collected but additional research on this topic was recommended. Criminal justice referrals constitute a substantial proportion of the publicly funded drug treatment population in the United States. According to Farabee, Prendergast, and Anglin (1998), the criminal justice system is responsible for 40 to 50% of referrals to community-based treatment programs. For example, California's Proposition 36, Substance Abuse and Crime Prevention Act (SACPA), accounted for a total of 48,473 offenders referred for treatment during its fourth year. Of this total, 74.9% entered treatment (California Department of Alcohol and Drug Programs, Hser et al., 2007). "SACPA offenders who completed treatment had better outcomes during the follow-up period. Treatment completers had lower levels of drug use, lower rates of unemployment, and were less likely to re-offend" (California Department of Alcohol and Drug Programs, 2007, p. 136).

Farabee et al. (1998) clearly pointed out the terminology of the criminal justice referral: The terminology used to discuss "coerced treatment" is far from consistent: "coerced," "compulsory," "mandated," "involuntary," "legal pressure," and "criminal justice referral" are all used in the literature; sometimes the terms are used interchangeably within the same article. This would not be a problem if these terms were synonyms. But "coercion" is not a single well-defined entity; it in fact represents a range of options of varying degrees of severity across the various stages of criminal justice processing. "Coercion" can be used to refer to such actions as a probation officer's recommendation to enter treatment, a drug court judge's offer of a choice between treatment or jail, a judge's requirement that the offender enter treatment as a condition of probation, or a correctional policy of sending inmates involuntarily to a prison treatment

program in order to fill the beds. In other cases, a treatment client merely being involved with the criminal justice system is sufficient for him to be brought under the umbrella of “coercion” (Farabee et al., 1998, p. 2) Farabee et al. reviewed 11 published studies involving the relationship between various levels of legal pressure and substance abuse treatment. Of these, five found a positive relationship between criminal justice referral and treatment outcomes, four reported no difference, and two studies reported a negative relationship. The researchers noted considerable variation in the legal pressure applied, different outcome measures, and a range of types of programs and substances treated in these studies.

### **Chapter Summary**

According to existing research, EI involves the ability to understand one’s own emotions and feelings and to manage them in support of activities such as thinking, decision making, and communication. Emotionally intelligent people know how to control their emotions and feelings for their own benefit and the benefit of others. EI in the workplace has been used as a central aspect of work life. Contemporary researchers are beginning to examine emotions as an integral and inseparable part of any organization. After many investigations about the term EI and their influence in the individuals’ behavior, researchers believe that it has great impact in the success or failure of people in the workplace.

## **CHAPTER III**

### **METHODOLOGY**

The purpose of this study was to determine if a relationship exists between the emotional intelligence as well as the personal and professional characteristics of counselors working in residential drug and alcohol treatment centers and client success in treatment. Discharge status is identified as successful, unsuccessful, or against medical advice from an inpatient treatment setting.

#### **Research Questions**

1. Are there personal and/or professional characteristics of addiction counselors that contribute to a client's success in treatment?
2. Does the counselor's emotional intelligence play a role in a client's success in residential addiction treatment?

To address each of these questions, the following hypotheses have been developed:

- H01. Personal and/or professional characteristics (e.g., education level, age, and years of experience) of addiction counselors are not predictive of client success in treatment (as indicated by discharge status).
- H02. Emotional intelligence, as measured by the Mayer-Salovey-Caruso Emotional Intelligence Test, is not predictive of a client's success in treatment (as indicated by discharge status).

#### **Research Design**

This study utilized a correlational, exploratory research design to explore whether Emotional Intelligence plays a role in the outcome of treatment for residential addiction clients as identified upon discharge. The following three discharge statuses were identified: Successful,

Unsuccessful, Against Medical Advice. This quantitative correlational study was based on the concepts and assumptions first proposed by Mayer, Salovey, and Caruso (2004) and expanded by Caruso and Salovey (2004) in their abilities model.

### **Participants**

The target population in this study included drug and alcohol counselors who have at least a Bachelor's degree in counseling and or related fields, and who provided direct counseling services to adults in residential treatment for substance dependence for at least 51% of their total clock hours. The target sample consisted of 54 drug counselors who work in a for-profit, substance abuse treatment center setting in Pennsylvania. Four different facilities in Pennsylvania were contacted.

### **Data Collection**

#### **Instrumentation**

Emotional intelligence was measured through the use of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). The MSCEIT (Mayer, Salovey, & Caruso, 2002) is an ability test that involves problem-solving with and about emotions. The objective of the study was to determine if any correlations exist among emotional intelligence of counselors working in inpatient drug and alcohol treatment centers, as measured by the MSCEIT, counselor characteristics, and client outcome as identified upon discharge.

**Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT).** The MSCEIT, the first abilities-based measure of EI, is a 141-item measurement tool designed to assess EI using an abilities-based scale. The scale measures how well people solve emotional problems and perform tasks rather than asking for their subjective assessment of their emotional skills and abilities (Mayer, Salovey, Caruso, & Sitarenios, 2003). The MSCEIT is a performance-based

measurement for people 17 years of age or older. The MSCEIT can be administered by paper and pencil or online. All responses are computer-scored by Multi-Health Systems, Inc. The study was conducted using the online version of the MSCEIT. The MSCEIT scale yields an overall EI score, two area scores (i.e., Emotional Experience and Emotional Reasoning), and scores for each of the four EI branches. The MSCEIT is the first measurement to report valid scores in all four areas of EI (Mayer et al., 2003). The MSCEIT, developed by Mayer et al. (2002), is intended to measure for the following skill groups (a) perceiving emotion accurately, (b) using emotion to facilitate thought, (c) understanding emotion, and (d) managing emotion.

Mayer, DiPaolo, and Salovey (1990) believed that it was crucial to measure how well a person functions in the four criteria of emotional intelligence. The Mayer and Salovey model states that emotional intelligence is a person's capacity to understand emotional information and reason with emotions. For Mayer and Salovey, there are four branches of emotional intelligence or emotional intelligence abilities, which include

- Ability to accurately perceive emotions.

Perceiving emotions is said to be the initial and/or most basic area of emotional intelligence. This aspect is connected with the nonverbal response and expression of emotion. Emotional expression is a form of crucial social communication as seen in the evolution of animal species, while facial expressions are recognizably parts of any communication and/or interaction of human beings.

- Ability to utilize emotions in facilitating thinking.

This second branch is parallel to the first branch, particularly in regard to how basic they both are. However, this area of emotional intelligence deals with the emotions' capacity to make entry and eventually guide the cognitive system thereby promoting

thinking. This is the very reason why it is believed that maintaining a good system of emotional input will enhance one's ability to think directly towards the matters that are truly important.

- Ability to understand emotional meanings.

Emotions are very important particularly when conveying and receiving information. Understanding emotional messages and the actions associated with them is an important aspect of this area of skill. After an individual identifies the specific type of message and the possible action that is apt for such a message, the capacity to reason with and about various emotional messages and actions follows. Thus, in depth understanding of the emotions would mean comprehending the meaning of emotions and learning to reason out these meanings.

- Ability to manage emotions.

To reiterate, emotion conveys information; hence it is part of the voluntary action and having open emotional signals is very important. This is because open emotional signals will help prevent miscommunication or misunderstanding. It also helps enhance positive communication between the sender and the receiver of the message. Through emotional intelligence, it becomes possible for a person to manage one's own and others' emotions thereby promoting one's own and others' personal and social goals.

When scored, the MSCEIT will yield a total score, two area scores (experiential and strategic), four branch scores (perceiving, facilitating, understanding, and managing), and eight task scores, two from each branch score. However, for this study, only the branch scores were used for analysis. The publishers of the instrument, Multi-Health Systems Incorporated (MHS),

scored counselor responses to the MSCEIT test, and reports were sent to this researcher. According to the User's Manual (Mayer, Salovey, & Caruso, 2002, p. 18), "MSCEIT scores are computed as empirical percentiles, then positioned on a normal curve with an average score of 100 and a standard deviation of 15." Individuals scoring 90 to 109 are considered to be in the average range. Those scoring 15 above or below the mean (100) are considered to be one standard deviation above or below the mean or in the 84th and 16th percentiles, respectively. According to the guidelines for interpreting MSCEIT scores, individuals with scores above 110 are considered to have competence and strength in emotional intelligence. Those with scores below 90 should consider improvement or development in emotional intelligence (Mayer, Salovey, & Caruso, 2002).

## **Procedures**

Data collection began after approval from the Duquesne University Institutional Review Board. Counselors were given two packets of information. One packet contained forms for the counselors to complete and hand in. The other packet was for the counselors to keep. In the first packet, counselors completed an Informed Consent Form, the Identification Form, and the Demographic Form, which was returned to the researcher via mail. The demographic form collected data on age, gender, years in the counseling profession, program site, and education level. The identification form asked for name, address, telephone number, and email address, and was used for two purposes. First, it was used to assign an identification number to the counselor's data to ensure confidentiality, Secondly, the email address was used for sending reminders to take the online test. This researcher collected from the student the Identification Form, Informed Consent Form, and Demographic Form.

The second packet of information that the counselors received included the following: A cover letter explaining the study, the counselor's copy of the informed consent form, and instructions for completing the online emotional intelligence test. The counselors were instructed to keep this packet for their information and reference.

### **Human Participants and Ethics Precautions**

Participants of the study were given the link to the MSCEIT online version through e-mail invitation. The link provided the participants the opportunity to read the online informed consent and concur to the conditions prior to beginning. Participants were told that there were no risks greater than those faced in everyday life. Participants were informed that responses would be kept confidential. Participants were informed that they are under no obligation to participate in this study, and consent could be revoked at any time.

Strict confidentiality was maintained throughout the study, using several means to protect the information provided by study participants. Informed consent was obtained prior to study participation. Emotional intelligence scores were held strictly confidential by the MHS testing institute, whose privacy policy is available on their website. Similarly, the study web site was protected by the commercial web design company who housed the study web site under their privacy own and confidentiality policy. Only the study researcher had access to the study scores and identifying information. The study participants utilized a study code to identify themselves. Only the study researcher viewed both EI scores and demographic/career information data. When manually entered into the study SPSS 22 database, data were coded and no identifiers used. Results were not presented in a manner that could reveal the identity of any individual in the study. Hard copy materials related to the study were kept in a locked and secure location for

the duration of the study and all hard copy data summaries were destroyed at the conclusion of the study.

### **Data Analysis**

Data analysis consisted of the following three steps:

- Step 1. Correlation analysis was utilized to evaluate the strength of the association between counselors' level of emotional intelligence and discharge criteria of the clients counseled while in drug and alcohol inpatient setting. A total of three months of prior discharges from each counselor was analyzed. Relationship between the independent variable (emotional intelligence) branch scores and dependent variable (discharge status) were ascertained using the corresponding scores obtained from the variables and tested the same through Pearson product moment correlation coefficient.
- Step 2. Data were screened for normal distribution and univariate outliers by visual examination of histograms and scatterplots. Skewness and kurtosis statistics were generated in SPSS 22. Multivariate outliers were assessed by examining Mahalanobis distances generated by SPSS 22 regression. Linearity and homoscedasticity were checked with scatterplots of variables and their residuals. Multicollinearity was tested by checking SPSS 22 collinearity diagnostics against tolerance criteria for inclusion of variables. These assumptions included normal distribution, independence of variables, the dependent variable has the same variance score related to the independent variables, and the dependent and independent variables have a linear relationship. The assumptions were stated regarding the scores and observations. These assumptions were evaluated by analyzing normal distribution, the Kolmogorov-Smirnov test, and a scatter plot.

- Step 3. Research hypothesis question #1 (Are there personal and/or professional characteristics of addiction counselors that help to determine success in treatment?) was addressed by entering each counselor's educational level, age, and years of experience in drug and alcohol in the regression equation along with three months of prior discharge statuses from the identified counselor's caseload. The purpose of MLR is to assess the relationship between an independent variable (emotional intelligence branch scores) and multiple dependent variables (educational level, age, years of experience in drug and alcohol, and discharge status). The counselor's total EI score was analyzed along with six months of prior discharge statuses from the identified counselor's caseload. Research hypothesis question #2 (Does the counselor's emotional intelligence play a role in determining the outcome of treatment for clients in residential addiction treatment?) was addressed by hierarchical multiple linear regression (MLR). EI branch scores were entered in step 2 in a block with forward selection. Forward selection instructs analysis software to enter only those variables that contribute significantly to the regression model, and in order of the greatest contribution (Tabachnick & Fidell, 2008). This was utilized to determine the unique contributions of any EI scale score to explaining the variance in DVs. For the purpose of this study discharge statuses, that is, successful, unsuccessful, were converted to percentages and analyzed as numeric values in the regression analysis.

### **Chapter Summary**

This chapter presented a description of the instrument used to gather data for this research along with the sample and data collection procedures and the statistical techniques selected to develop this research. Data from this research were collected with the Mayer-Salovey-Caruso

Emotional Intelligence Test (MSCEIT) and the discharge summaries of adults within a drug and alcohol inpatient setting. The sample was gathered from four different inpatient substance abuse treatment centers in Pennsylvania. To achieve the main objective of this research correlation a multiple linear regression analysis was performed.

## CHAPTER IV

### RESULTS

The purpose of this study was to determine if a relationship exists between the emotional intelligence as well as the personal and professional characteristics of counselors working in residential drug and alcohol treatment centers and client success in treatment. The types of discharges are identified as Successful, Unsuccessful, and AMA (against medical advice). A successful discharge status is assigned to an individual who enters substance abuse treatment, follows a prescribed treatment plan, and stays for the suggested amount of days as identified by his or her primary counselor. Of the 54 counselors who participated in the study, the percent of clients successfully discharged ranged from 31.25% to 80.95% with an average of 52.62%. An unsuccessful discharge is assigned to an individual who refuses to adhere to facility rules and or participate in his or her treatment. The percent of unsuccessful discharges ranged from 19.05% to 90.91% with an average of 48.47%. The AMA discharges ranged from one to 10 with an average of 4.69%. Further discharge information is presented in Table 4.1.

Table 4.1

*Mean and Standard Deviations on the Type of Discharge Received (N=54)*

Type of Discharge	Min	Max	M	SD
Successful	31.25	80.95	52.62	10.98
Unsuccessful	19.05	90.91	48.47	12.83
Against Medical Advice	4.17	42.88	21.66	9.57

*Note.* The data in the table are from 54 counselors. There were no missing data.

## **Research Questions**

1. Are there personal and/or professional characteristics of addiction counselors that contribute to a client's success in treatment?
2. Does the counselor's emotional intelligence play a role in a client's success in residential addiction treatment?

## **Description of Sample**

Participants for this study were recruited through secured emails of adult addiction counselors identified within four addiction treatment facilities and the research investigator's contacts through the use of convenience sampling. The target population for this study included drug and alcohol counselors who have at least a Bachelor's degree in counseling and/or related fields, and who provide direct counseling services to adults in residential treatment for substance dependence for at least 51% of their total clock hours. Four different facilities in Pennsylvania were contacted. Ninety-five counselors composed the population of eligible counselors. To be included in the study, the counselor must have worked directly with clients in a substance abuse center for at least 51% of his or her total clock hours and must have been working at the facility for at least three months. Of the 64 counselors enrolled to be in the study, 54 (84%) completed the emotional intelligence test.

The descriptive statistics were determined using a frequency distribution in SPSS. The Mean age of the total group of counselors was 34.09 ( $SD = 10.18$ ). Of the 54 counselors, the average years of experience in drug and alcohol were 5.63 ( $SD = 4.06$ ). Four of the counselors had over 15 years' experience in the field of drug and alcohol. The 54 counselors that participated in this study is a fair representation of the overall population based on the total

counselors currently employed at each of the four facilities. Further demographic information is provided in Table 4.2.

Table 4.2

*Demographic Information*

Variables	Percent of Participants
<b>Gender</b>	
Male	29.6
Female	70.4
<b>Ethnicity</b>	
White	90.7
Black/African American	9.3
<b>Field/Major</b>	
Psychology	13.0
Social Work	22.2
Counseling	64.8
<b>Educational Level</b>	
Bachelors Degree	5.6
Masters Degree	94.4

*Note.*  $N = 54$

### **Emotional Intelligence and Branches**

The Total emotional intelligence score indicates an overall capacity to reason with emotion and to use emotion to enhance thought. It reflects the capacity to perform well in four areas: (a) to perceive emotions; (b) to access, generate, and use emotions to assist thought; (c) to understand emotions and emotional knowledge; and (d) to regulate emotions so as to promote emotional and intellectual growth (Mayer & Salovey, 1997, p. 8). Total EI scores ranged from 33 to 113, with a mean of 81.13. A frequency distribution of total EI scores demonstrated that 31 or (57%) of the counselors scored within the “consider developing” range; 20 (37%)

counselors scored within the “competent”, and 3 (6%) counselors scored within the “skilled” range. For the purpose of this study; the following range of scores were analyzed:

#### Score Ranges for MSCEIT

<b><u>Score Range</u></b>	<b><u>Description</u></b>
0 - < 70	Improve
>= 70 and < 90	Consider Development
>= 90 and 110	Competent
>= 110 and < 130	Skilled
>= 130	Export

#### Branch Scores of MSCEIT

##### **Perceiving Emotions**

The mean score for the branch Perceiving was 89, with a range of 37 to 126. Frequency distribution analysis demonstrated that 6 (11%) counselors scored within the “Improve” range; 17 (31%) counselors scored within the “consider developing” range; 27 (50%) counselors scored within the “competent” range, and 4 (8%) counselors scored within the “skilled” range.

##### **Using Emotions**

The mean score for the branch Using was 87, with a range of 36 to 126. Frequency distribution analysis demonstrated that 15 (28%) counselors scored within the “Improve” range; 15 (28%) counselors scored within the “consider developing” range; 18 (33%) counselors scored within the “competent” range, and 6 (11%) counselors scored within the “skilled” range.

##### **Understanding Emotions**

The mean score for the branch Understanding was 84, with a range of 39 to 117. Frequency distribution analysis demonstrated that 14 (26%) counselors scored within the

“Improve” range; 14 (26%) counselors scored within the “consider developing” range; 25 (46%) counselors scored within the “competent” range, and 1 (2%) counselors scored within the “skilled” range.

### **Managing Emotions**

The mean score for the branch Understanding was 83.86 ( $SD = 19.83$ ). Frequency distribution analysis demonstrated that 15 (28%) counselors scored within the “Improve” range; 21 (39%) counselors scored within the “consider developing” range; and 18 (33%) counselors scored within the “competent” range. Further information pertaining to the four branch scores is present in Table 4.3.

Table 4.3

*Mean and Standard Deviations on the Counselors’ Emotional Intelligence Branch Scores (N = 54)*

EI Branch	Min	Max	M	SD
Perceiving	37.21	125.85	88.98	17.50
Using	35.86	126.14	86.57	21.33
Understanding	38.93	117.48	83.86	19.83
Managing	48.15	108.18	81.80	14.76

*Note.* The data in the table are from 54 counselors. There were no missing data.

### **Correlational Analysis**

A correlation analysis was run to evaluate the strength of the association between the counselors’ level of emotional intelligence (as identified by the four branches), discharge status (Successful, Unsuccessful, and AMA) of the clients counseled while in a drug and alcohol

inpatient setting, and demographic variables (age, years in drug and alcohol, years in profession, gender, ethnicity, education). Relationship between the independent variables (years in drug and alcohol, perceiving emotions, understanding emotions, using emotions, managing emotions), and dependent variable (percent successful) were determined using the corresponding scores obtained from the variables and tested the same through Pearson product moment correlation coefficient statistics.

For this analysis correlations were found between (IV) demographic variables and branch scores of EI and the (DV) percentage of successful clients. The correlation between the demographic scores (age, years in drug and alcohol, years in profession, gender, ethnicity, and education) and the percent of successful clients were weak and presented no statistical significance. The correlation between the four branch scores of EI and the percent of successful clients were also weak and presented no statistical significance; however, the correlations between and among the four branch scores were strong (r-values between .640 and .784, p-values < .001). Table 4.4 presents the correlations.

### **Examination of Model Assumptions**

The second step to this analysis involved testing the assumptions. Box plots were obtained for independent variables “Years in Drug and Alcohol” and “Years in Profession.” Upon further review of the data (IV) years in drug and alcohol and years in profession were identified as outliers in cases 4, 7, and 38. The identified outliers were recoded into the highest values that were not determined to be outliers (Parke, 2012). After recoding the identified outliers the assumptions of normality, linearity, homoscedasticity, and multicollinearity were met.

Table 4.4

*Correlations*

	1	2	3	4	5	6	7	8	9	10	11
1. Age	1										
2. Years Exp. In Drug and Alcohol	.676**	1									
3. Years Exp. In Counseling Prof.	.887**	.758**	1								
4. Gender	-.050	.051	-.123	1							
5. Ethnicity	.111	.082	.083	-.067	1						
6. Educational Level	-.122	-.199	-.150	-.197	.077	1					
7. Perceiving Emotions	.020	.138	.026	-.029	-.018	.114	1				
8. Understanding Emotions	.039	.147	.070	-.130	.008	.168	.740**	1			
9. Using Emotions	-.064	-.014	-.051	.028	-.123	.227	.758**	.784**	1		
10. Managing Emotions	.016	.120	.078	.089	.117	.202	.640**	.754**	.742**	1	
11. Percent of Successful Clients	.161	.202	.180	-.069	-.088	-.029	.008	.096	.105	-.027	1

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

## **Regression Analysis**

A hierarchical multiple linear regression was used to analyze data in order to answer the two research questions. Hierarchical regression is used to evaluate the relationship between a set of independent variables and the dependent variable, controlling for or taking into account the impact of a different set of independent variables on the dependent variable. In hierarchical regression, the independent variables are entered into the analysis in a sequence of blocks, or groups that may contain one or more variables. In this study, (IV) years in drug and alcohol and (DV) percent of successful clients were entered in the first block. Due to the sample size of this study and lack of statistical significance the independent variables of age, gender, years in the counseling profession, and educational level were not included in the regression analysis. The (DV) percent successful and (IV) the four subscales of EI (perceiving emotions, understanding emotions, using emotions, and managing emotions) were entered in the second block.

### **Statistical Tested Null Hypothesis**

The following hypothesis were analyzed in this study was:

H01. Personal and/or professional characteristics (e.g., education level, age, years of drug and alcohol experience, and years of experience in counseling profession) of addiction counselors are not predictive of client success in treatment (as indicated by discharge status).

Percent of successful clients was the dependent variable for this two-step hierarchical regression analysis. The counselors' years in drug and alcohol were entered in step one. The counselors' years in drug and alcohol explained/accounted for 4.1% of the variance in (DV) percent of successful discharges.

HO2. Emotional intelligence, as measured by the Mayer-Salovey-Caruso Emotional Intelligence Test, is not predictive of a client's success in treatment (as indicated by discharge status).

The four independent variables were entered in step two. When adding the four subscales of EI the model as a whole explained 11.8% of variance in the dependent variable. The four subscales explained an additional 7.8%. An examination of the Standardized Coefficient (Beta values) and Significance revealed no statistical significant contribution made from any of the variables ( $p > .05$ ). According to this model, the best predictor of a client's success in treatment after accounting for the counselor's years of drug/alcohol experience is the counselor's ability to use emotions ( $\beta = .41$ ), and the counselor's ability to manage emotions ( $\beta = .33$ ). The regression statistics are presented in Table 4.5 for each of the two steps.

Table 4.5  
*Summary of Hierarchical Regression Analysis*

Variable	Percent Successful			
	Model 1		Model 2	
	B	Beta	B	Beta
Constant	49.553		50.051	
Years Exp. In D/A	.545	.202	.694	.256
Perceiving Emotions			-20.126	-.258
Using Emotions			31.767	.410
Understanding Emotion			12.568	.178
Managing Emotions			-29.954	-.330
$R^2$	.041		.118	
$F$	2.202		1.059	
$\Delta R^2$	.022		.027	
$\Delta F$	.144		.387	

Note.  $N = 54$ ;  $p < .05$

The hierarchical multiple analysis revealed that the predictor variable years' experience in drug (step one) and alcohol accounted for 4.1% of the variance in client percent successful from treatment, and was not statistically significant,  $R^2 = .041$ ,  $F(1, 52) = 2.102$ ,  $p = .144$ . The addition of the four subscales (perceiving emotions, using emotions, understanding emotions, managing emotions) accounted for 11.8% of the variance in client percent successful from treatment; however, was not statistically significant,  $R^2$  of .118  $F(4, 48) = 1.059$ ,  $p = .387$ . The independent variables for both step one and step two accounted for 11.8% of the variance in client percent successful scores.

### **Chapter Summary**

This chapter provided a description of the counselor sample populations' emotional intelligence, including demographic information. The percentage of successful clients (which was the dependent variable for this analysis) was obtained from the discharge status form and the scores on the MSCEIT determined participants' level of emotional intelligence. The data revealed an insignificant relationship between counselors' level of emotional intelligence and client success in drug and alcohol treatment (as indicated by discharge status), which supported hypothesis one. Also, the personal and/or professional characteristics (e.g., education level, age, and years of experience) of addiction counselors' were insignificant towards client success in drug and alcohol treatment, which supported hypothesis two. A hierarchical multiple regression analysis was used to determine the variables predictive of percent of client success scores. Of the four subscales, a counselor's ability to use emotions was the most important predictor of client success (beta = .410). The data revealed the counselor's ability to manage emotions had the second most impact predicting (beta = .300). Overall, the four subscales of emotional

intelligence as measured by the MSCEIT, and counselors' years of experience in drug and alcohol account for 11.8% of the variance toward clients' success in treatment.

## **CHAPTER V**

### **DISCUSSION AND RESULTS**

Some individuals have a greater capacity than others to carry out sophisticated information processing about emotions and emotion-relevant stimuli and to use this information as a guide to thinking and behavior (Mayer, 2006). The purpose of this study was to determine if any correlations exist among emotional intelligence of counselors working in residential drug and alcohol treatment centers, as measured by the Mayer-Salovey-Caruso Emotional Intelligence Test, and client outcome as identified upon discharge.

#### **Summary of the Study**

This study utilized a correlational, exploratory research design to explore whether Emotional Intelligence plays a role in the outcome of treatment for residential addiction clients as identified upon discharge. The following three discharge statuses were identified: Successful, Unsuccessful, Against Medical Advice. This quantitative correlational study was based on the concepts and assumptions first proposed by Mayer, Salovey, and Caruso (2004) and expanded by Mayer, Salovey, and Caruso (2000) in their abilities model. Participants for this study were recruited through secured emails of adult addiction counselor identified within four addiction treatment facilities and the research investigator's contacts through the use of convenience sampling.

The target population for this study included drug and alcohol counselors who have at least a Bachelor's degree in counseling and or related fields, and who provide direct counseling services to adults in residential treatment for substance dependence for at least 51% of their total clock hours. Four different facilities in Pennsylvania were contacted. Ninety-five counselors composed the population of eligible counselors. To be included in the study, the counselor must

have worked directly with clients in a substance abuse center for at least 51% of their total clock hours and have been working at the facility for at least three months. Of the 64 counselors enrolled in the study, 54 (84%) actually completed the emotional intelligence test.

## **Major Findings**

### **Research Question #1**

The first research question examined whether the personal and/or professional characteristics of addiction counselors contributed to the discharge status of the clients they counseled over a period of three months while in treatment at an inpatient substance abuse center.

**Hypothesis 1.** The hypothesis indicated personal and/or professional characteristics (e.g., education level, age, and years of experience) of addiction counselors would not be predictive of client success in treatment (as indicated by discharge status). Results indicated Total EI score did not correlate significantly with any of the main demographic variables. Total EI has been found in other studies to correlate significantly with age (Ciarrochi, Chan, Caputi, & Roberts, 2001), for example, but this was not the case with this study. This study founded that counselor's years of experience was not statistically significant and only accounted for 4% of the variance towards client success. Although veteran counselors may disagree, Hersoug, Hogland, Monsen, and Havik (2001) found that experience, professional training, and professional skills do not have a significant impact on client's success.

The research in this area appears inconclusive in that variables such as years of clinical experience, or amount of supervision do or do not have any significant relationship to the counselor's skill level or the outcome of therapy (Hogland, 1999). One study did indicate a small positive relationship between the counselor's experience and the quality of the

relationship; however, in a more recent study, the counselor's level of experience was not found to be predictive of client's success (Hersoug et al., 2001).

It should be noted that the frequency of premature dropout rates of clients from treatment has been more associated with inexperienced than experienced counselors, which could explain the finding that experience does make a difference towards the successful treatment outcome of in the therapeutic alliance (Hoglund, 1999). It is worth noting that other variables such as training, level of supervision, and facility leadership may have yielded a greater impact statistically. However, when taking into consideration all of the aforementioned I think it is notable to mention that in this study the counselor's years of experience in drug and alcohol, along with the four subscales of EI, accounted for 12% of the variance towards client success.

### **Research Question #2**

In the second research question, the emotional intelligence of each counselor was measured and compared to the discharge status of the clients in which they provided counseling within a three month time frame. Wagner, Mosely, Grant, Gore, and Owens (2002) conducted a similar study which directly examined the impact of EI in practitioners on outcomes relevant to patient care; their study results indicated no significant relationship between global EI and patient satisfaction. There were no significant correlations between EI subscales and satisfaction. The study also noted no significant difference between doctors with 100% satisfied patients and less than 100% satisfied patients on the happiness subscale of Bar-On.

**Hypothesis 2.** The second hypothesis is that Emotional Intelligence, as measured by the Mayer-Salovey-Caruso Emotional Intelligence Test, is not predictive of a client's success in treatment (as indicated by discharge status).

Counselor's emotional intelligence scores in this study, although not statistically significant, were meaningful towards clients obtaining a successful discharge. Numerous confounding variables could account for this variance such as therapeutic alliance, empathy, client's level of motivation, personality, and symptomology. A number of studies demonstrate that various counselor relational skills can mediate therapeutic process and outcome. For example, research suggests that helpful therapists are more empathic (Greenberg, Domitrovich, & Bumbarger, 2001; Lambert & Barley, 2001; Orlinsky & Howard, 1986), manage interpersonal ruptures effectively (Safran & Muran, 2000; Safran, Muran, Samstag, & Stevens, 2002), and manage difficult emotions effectively (Dalenberg, 2004; Hill et al., 2003). Such skills are consistent with those skills described in the EI model, and therefore offer examples of how EI might directly mediate treatment outcome.

A positive correlation was demonstrated between total EI score and client success ( $p < .05$ ). This finding is noteworthy because in this study, counselors' emotional intelligence was used to measure clients' success in treatment. This finding supports the evidence in other professions that higher levels of EI are related to better performance. Emotional intelligence has been found, in a wide range of professions, to be related to higher levels of performance and positive organizational outcomes. Song et al. (2010) studied the impact of general mental ability (GMA) and emotional intelligence (EI) on college students' academic and social performance. Although GMA and EI both had an influence on academic performance, GMA was found to be a stronger predictor of academic performance than EI. However, only EI, not GMA, was related to the quality of social interactions with peers. In a study by Nelis, Quoidbach, Mikolajczak, and Hansenne (2009), study participants were divided into two groups. One group received an EI training of four group sessions of 2-1/2 hours each. The other group did not receive any training.

After the treatment was completed, the training group showed a significant increase in emotion identification and emotion management compared to the control group. Six months later, the training group still had the same improvement on emotion identification and emotion management. The control group showed no change.

In this current study, it should be noted that based on the outcomes, it is not enough for a counselor to perceive and understand emotions (knowledge based), as measured by the MSCEIT. Based on this study, a successful counselor must be able to use and manage (action based) their emotions, as measured by the MSCEIT, in order to increase their client success rate. This makes perfect sense whenever one takes into consideration the importance of counselor/client therapeutic relationship and how as individuals we all have certain natural characteristics.

In the study population, the mean Total EI was in the competent range, 37% of the counselors in the study scored within the “competent” range of scores. A total of 57% of the participants scored within the “consider developing” range, and 6% scored within the “skilled” range. In summary of the distribution, 43% of the counselors scored competent or above.

In the analysis of branch scores, the mean scores for all four branch abilities fell with the “consider development” range, but there were differences in the ranges of branch scores. In the study sample, 44% of the counselors scored in the “competent” range on the branch Understanding Emotions, 52% of the counselors scored in the “competent” range on the branch Perceiving Emotions, 33% of the counselors scored in the “competent” range on the Managing Emotion and the Using Emotion branches.

The data suggest that counselors who participated in the study demonstrated ability in the branch Perceiving Emotions above the other branches and demonstrated less skill in the branch Managing Emotions. This may be attributed to the fact that perceiving emotions requires a

counselor's ability to identify the expressions of clients as opposed managing their own emotions. Little research exists in any profession that describes the typical distribution of scores for that profession. No research study has compared the emotional intelligence of various professions. This being said, the skills that are reflected in the four-branch ability model of EI are skills required of a counselor. For this reason, it was a concern that 57% of the counselors scored in the "consider developing" range. Numerous reasons may have contributed to this outcome. Counselors may not receive any supervision around the importance of EI and may have very little initiative to do so. Allotted time to attend trainings on EI may not be afforded to the counselor; therefore they lack skills in this area.

It should be remembered when considering these percentages that the EI scoring range was based on a normative sample that consisted of a general population. This normative group consisted of "average" people, not health care professionals or indeed professionals of any description. The study population varied considerably from the normative sample. Why were the emotional intelligence scores higher? It might be assumed that counselors, by the very nature of counseling, would be highly emotionally intelligent. Several possibilities could be considered, which include the education of counselor, testing methodology, the nature of the counselor's work environment, hiring practices, and issues related to the construct of emotional intelligence

### **Limitations to the Study**

This study had several limitations that were specific to the method and sample of the study. The results were not generalizable because of the limitations to the sample; for example, the limited sample size does not depict the overall counseling profession. Nonetheless, several demographic characteristics of the group should be noted. The ethnicity of the sample was not

representative of all of the counseling profession. The sample population consisted of a majority of Caucasian subjects and lacked overall diversity in regard to ethnicity. Furthermore, male gender was not represented as the study had fewer male counselors. The sample selection was non-random, voluntary, and self-selected. This method of selection precludes any claims to sample representativeness or generalizability. The study population size was much smaller than was hoped at the onset of the study. Numerous factors influenced the sample size. First, the researcher at the onset of the study was an employee of the study health system and knew many of the potential study participants; however, later departed from the company. Secondly, this was the first counselor research study to take place at any of the four facilities. Participation in counselor research may not have been a part of the facilities' culture. Furthermore, although counseling research is now taught routinely in schools, some percentage of the counselors working at the facilities may not have had counselor research in their counseling educational programs. Even those counselors who have studied counselor research and are familiar with its purpose and importance may not have ever participated in a counselor study themselves.

Finally, as an organization, the healthcare system participating in the study experienced a period of significant reorganization and staff turnover during the time of the study data collection. This was not anticipated at the time the organization was selected to be the study site. This reorganization involved downsizing of staff reallocation of managerial responsibilities and, in some cases, restructuring departments. It is not uncommon during this type of reorganization for there to be a higher than usual level of organizational anxiety and uncertainty. New behavior, such as participating in a research study, is more difficult to attempt during insecure and high anxiety situations such as facility reorganization. It is certainly possible that this contributed to

an environment within which potential study participants were less likely to be willing to participate in the study.

The benefits and burdens of study participation may have limited the sample size. The emotional intelligence test used in this study takes approximately 45 minutes to complete. It is possible the length of time involved in study participation led to sample size limitation. Also, the MSCEIT requires self-report. Self-report measures have a variety of limitations associated with their use, one of which is poignantly illustrated by the title of Kruger and Dunning's (1999) article entitled "Unskilled and Unaware of It" in which they indicate that people tend to hold inflated views of their own competence in both emotional and intellectual domains.

### **Implications for Counseling**

The clinical practice environment today is one that challenges not just a counselor's ability to deliver care safely and comprehensively. It also challenges the counselor's ability to sustain himself or herself professionally, in a manner such that the counselor continues to grow, learn, and thrive in clinical practice. Increasing client acuity, work overload, stressful work conditions, and lack of meaningful support for counseling practice all work together to not only drive counselor from counseling but to disempower and diminish those counselor who remain in practice. Negative influences in the environment of care have been identified as being related to not only counselor recruitment and retention, but also quality of care, safety, and effective organizational communication (Abraham, 2005). Miller, Wilbourne, and Hetteema (2005) conceptualized "Milieu treatments" as approaches that embrace the philosophy that treatment must occur in a special setting with a unique, therapeutic atmosphere; this is a philosophy common to Milieu inpatient and residential programs.

The skills of emotional intelligence, which have been demonstrated in other professions to be related to professional survival and adaptability, may have merit in promoting the qualities needed for counselors to sustain themselves professionally. Skill building in this area may be crucial for building and sustaining the counseling workforce. To date, no research has been done in counseling to evaluate the impact of such curricula, but in the research literature outside of counseling, at least one study has demonstrated the efficacy of such education (Chang, 2006). Performance evaluation in both academic and clinical settings should be developed to include criteria related to emotional intelligence skills. Although it may be undesirable to recruit and hire counselors using EI testing, evaluation of EI criteria may be useful both in the education of counselors and post-graduation recruitment. This study provides preliminary support for the relevance of counselor EI to psychotherapy, and for the use of the MSCEIT as a meaningful and potentially valid measure of counselor EI. If replicated with larger samples, the results of this study may have potentially important clinical implications for the selection and training of therapists and the organization and delivery of psychotherapy services. Training methods that improve counselor EI scores may facilitate the transfer of efficacious emotional skills into the domain of therapy.

Counselor EI may constitute an important predictor of whether counselors develop therapeutic expertise over time, both during training and thereafter. However, more about EI needs to be understood. Are such skills trainable? Can different training models, theoretical orientations, treatment protocols or techniques, promote (or obstruct) the development of EI in counselors and have an impact upon their therapeutic skills? What is the relationship between EI and specific counselor's capacities or skills (e.g., empathy, the ability to deal constructively with counter transference, the ability to negotiate ruptures in the therapeutic alliance)? Do specific

branches of EI consistently predict changes in specific dimensions? And finally, are other models and measures of EI as relevant as or more relevant to the context of psychotherapy than the MSCEIT?

### **Recommendations for Future Research**

Several categories of emotional intelligence research are needed in counseling. First, studies on counseling students and counseling curricula are needed to identify if EI skills can be effectively taught and improved in counseling curricula. This has been successfully demonstrated in other professions (Chang, 2006). Secondly, research into specific EI competencies and their impact on clinical outcomes is needed. Relationships among EI and job satisfaction, autonomy, retention, staff relationships, client outcome, and professional development need to be explored. Replication of this study in larger groups of counselors and in wider and more diverse population is needed to expand the understanding of the role of EI in the counseling profession. Research into multidisciplinary relationships and organizational outcomes such as retention, organizational commitment, and professional advancement should be performed.

The relationship of EI and longevity in counseling, retention, and pro-social behavior is needed, as is research that relates EI to specific client outcomes. Clinical research on disease management outcomes could prove valuable in an increasingly challenging fiscal health care climate. Counselor educators both in academic settings and in clinical practice areas should consider including the abilities of emotional intelligence in counseling study curricula. A mixed method study with focus on both the client and counselor emotional intelligence would afford the researcher an opportunity to look at the research question from different angles, and clarify unexpected findings and/or potential contradictions.

## Next Steps

The next step for this research is to replicate this study at other adult inpatient substance abuse centers, particularly other facilities, which more regularly participate in counseling research studies. Other relationships, such as those between EI and counselor satisfaction as well as EI and client satisfaction, could provide additional insights into both client outcomes and counselor practice and retention. Academic research is also needed to identify specific educational outcomes related to emotional intelligence, for example, will counselors trained on emotional intelligence have better success with their clients as opposed to counselors who have not received any training. Longitudinal studies looking at the EI of both the counselor and client over time could be beneficial to the counseling profession. Research focusing on additional demographic characteristics could possibly increase professional knowledge base around EI and should be considered. Lastly, client outcome research within inpatient substance abuse centers may also demonstrate important relationships between client satisfaction and disease management outcomes.

In order to bridge the gap in knowledge pertaining to the relationship between counselor emotional intelligence and successful fieldwork performance, further research could be conducted regarding the different characteristics of counselors, specifically counselors who have difficulties in the area of clinical performance. Such results could reveal valuable information that could be integrated into the curriculum to promote success in fieldwork performance and to prevent potential failures. Further research would provide knowledge of predictors that would allow for early identification of counselors at risk of clinical difficulties so that appropriate supports can be implemented to assist them to reach their full clinical potential.

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APPENDIX A

CONSENT TO PARTICIPATE IN STUDY



DUQUESNE UNIVERSITY

600 FORBES AVENUE □□□ PITTSBURGH, PA 15282

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

- TITLE:** The measurement of counselors' emotional intelligence and client treatment outcomes in addiction treatment settings
- INVESTIGATOR:** VonZell Wade, M.Ed., LPC  
Doctoral Candidate  
Counselor Education and Supervision  
Telephone: xxx-xxx-xxxx  
Email: wadev@duq.edu
- ADVISOR: (if applicable:)** David L. Delmonico, Ph.D.  
Counseling, Psychology, and Special Education Dept.  
Duquesne University  
(412) 396-4032  
Delmonico@duq.edu
- SOURCE OF SUPPORT:** This study is being performed as partial fulfillment of the requirements for the doctoral degree in Counselor Education and Supervision (ExCES) at Duquesne University.
- PURPOSE:** You are being asked to participate in a research project that seeks to investigate the relationship between counselor's emotional intelligence and the discharge status of the clients they counseled over the past 6 months. You will be asked to complete the Mayer-Salovey and Caruso Emotional Intelligence Test on line. The test takes approximately 25-30 minutes to complete. You are also asked to give permission to the researcher to receive the discharge status of your clients and match the discharge status to your scores on the online instrument. These are the only requests that will be made of you.
- RISKS AND BENEFITS:** There are no risks greater than those encountered in everyday life. However, helping researchers understand the role emotional intelligence plays in treating drug and alcohol issues me help clients stay in treatment longer and increase their likelihood of successful completion of treatment.
- COMPENSATION:** You will not receive any money for participating, however, participation in the project will require no monetary cost to you.

**CONFIDENTIALITY:**

Your personal identity, records, and information will be protected throughout the research. A unique and random number will be assigned to you so that your name will never appear on any instrument or data collected for this research. A master list, matching you to your unique number will be kept separate from all other research material. All of the signed forms will be stored in a locked file in the researcher’s office, and your site will not receive a copy of any information you provided for this research. All of the information will only be revealed in future research through summaries that group everyone’s responses together, so that no one will know how you responded individually. All materials (both hardcopy and electronic) will be destroyed five years after the completion of the research.

**RIGHT TO WITHDRAW:**

You are under no obligation to participate in this study. You are free to withdraw your consent to participate at any time. This study is in no way associated with your employment or job performance. Supervisors and administrators will not know whether you agreed to participate or if you choose to withdraw. There will be no consequences should you choose not to participate, or if you choose to withdraw. In order to withdraw, simply contact the researcher and all of your collected data will be destroyed and not used in the study.

**SUMMARY OF RESULTS:**

A summary of the results of this research will be supplied to you, at no cost, upon request.

**VOLUNTARY CONSENT:**

I have read the above statements and understand what is being requested of me. I also understand that my participation is voluntary and that I am free to withdraw my consent at any time, for any reason. On these terms, I certify that I am willing to participate in this research project.

I understand that should I have any further questions about my participation in this study, I may call any of the following:

- VonZell Wade, M.Ed., LPC, Doctoral Candidate at (xxx-xxx-xxxx)
- Dr. David Delmonico, Doctoral Committee Chair/Advisor at (412) 396-4032
- Dr. Linda Goodfellow, Chair of the Duquesne University Institutional Review Board, at (412)-396-6548.

\_\_\_\_\_  
Participant’s Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Researcher’s Signature

\_\_\_\_\_  
Date

## APPENDIX B

### INSTRUCTIONS FOR TAKING EMOTIONAL INTELLIGENCE TEST

#### **Instructions for taking the Emotional Intelligence Test**

Identification # \_\_\_\_\_ (facility)

Thank you for agreeing to participate in my study. You are asked to complete the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) on a computer with an Internet connection in a quiet environment. You can access the website [www.mhsassessments.com](http://www.mhsassessments.com) and login with your assigned code and password (facility name) that follows:

Code:

Password: facility name (case sensitive, no spaces)

Instructions for completing the test will appear when you have logged in. Remember to answer every question. There is no penalty for guessing.

If you have any questions about completing this questionnaire feel free to contact me during the day at xxx-xxx-xxxx.

Once again thank you for your participation and cooperation.

VonZell Wade, M.S.Ed., LPC

**APPENDIX C**

**THE MSCEIT HAS BEEN REMOVED FROM THIS DOCUMENT DUE TO  
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## APPENDIX D

### SUBJECT DEMOGRAPHIC FORM

Identification Number \_\_\_\_\_

1. Date of Birth        /        /  
                          Month    Day    Year
  
2. Gender: (circle one)
  - a. Male
  - b. Female
  
3. Program Site: (circle one)
  - a. Altoona
  - b. Pyramid Pittsburgh
  - c. Hillside
  - d. Ridgeview
  
4. Field/Major: (circle one)
  - a. Psychology
  - b. Social Work
  - c. Counseling
  - d. Other (specify) \_\_\_\_\_
  
5. Educational Level: (circle one)
  - a. Doctorate Degree
  - b. Masters Degree
  - c. Bachelors Degree
  
6. How many years of experience in drug and alcohol \_\_\_\_\_
7. How many years of experience in the counseling profession: \_\_\_\_\_
8. How many years at this facility \_\_\_\_\_