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Emotional Intelligence and Performance in Graduate School Counseling Program

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**EMOTIONAL INTELLIGENCE AND PERFORMANCE IN A GRADUATE SCHOOL
COUNSELING PROGRAM**

by

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A Dissertation

Submitted to the Graduate Faculty

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University of North Dakota

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

**Grand Forks, North Dakota
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2004**

This dissertation, submitted by Gregory J. Gibson in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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This dissertation meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

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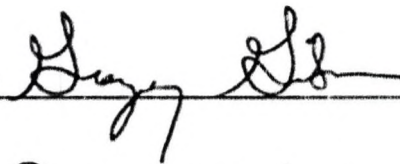
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ABSTRACT

Emotional Intelligence has been described in the popular literature as being a better predictor of life success than cognitive ability or personality (Gibbs, 1995). In recent years, there has been a plethora of emotional intelligence workshops, books, seminars, and web pages dedicated to education and training in the development of emotional intelligence in the workplace and in other life areas. Despite this trend, there is a considerable amount of discrepancy regarding the measurement and description of what emotional intelligence represents. Not surprisingly, there has also been inconsistency in the literature regarding its predictive value with job and academic success. Moreover, the notion of emotional intelligence development and conditions for change has not been explicitly evaluated. One area of potential promise for evaluating emotional intelligence change and predictive utility is in counseling graduate training, where students are trained in intra and interpersonal effectiveness and other areas related to the current notion of emotional intelligence. Moreover, students are closely monitored and evaluated on their clinical performance and professional development and thus incorporate more than GPA in determining student performance and success in the program.

In this study, two hypotheses were examined. First, I hypothesized that exposure to graduate training practicum and socialization into the program philosophy would increase one's level of emotional Intelligence (EI). Second, I hypothesized that both EI ability and self-report measures would explain variance in counselor performance

evaluations not otherwise explained by personality and cognitive ability. Using analysis of covariance and paired sample t-test procedures, hypothesis one was not supported by the data. Hypothesis two was tested using stepwise regression and correlational procedures and was also not supported in the current data. Limitations of this study and implications for research and practice will be addressed.

CHAPTER I

INTRODUCTION

The current study is an examination of the construct of emotional intelligence and the relationship of emotional intelligence to counselors in training. First, I hypothesized that a year long involvement in a master's level counselor training program will influence an individual's emotional intelligence, and that changes will be greater in ability measures of emotional intelligence than in the commonly used self-report measures of emotional intelligence. Second, I hypothesized that individual's levels of emotional intelligence will significantly predict their supervisors' ratings of their clinical performance. The examination of these issues provides important information on the construct and the predictive utility of emotional intelligence tests, particularly in relationship to counselors-in-training.

Emotional Intelligence Overview

The concept of emotional intelligence has received a considerable amount of attention in the last few years. Daniel Goleman, in his best selling book, "Emotional Intelligence", purports that emotional intelligence is an important determinant of future occupational success and quality of life (Goleman, 1995). A 1995 cover of Time magazine heralded emotional intelligence as being perhaps "the best predictor of success in life, redefining what it is to be smart (Gibbs, 1995, p. 540)". Mayer, Salovey and Caruso (1990) initially defined emotional

intelligence as the ability to understand and act on the emotions of the self and others. Other theorists have broadened the definition to encompass personality characteristics, such as empathy, interpersonal efficacy, and optimism (Pfeiffer, 2001). Reuben Bar-On (2000) defined emotional intelligence as primarily a set of emotional competencies. He stated that EI is “an array of non-cognitive capabilities and skills that influence one’s ability to succeed in coping with environmental demands and pressures (p.364)”. These capabilities include intra- and interpersonal qualities, stress management/ impulse control, adaptability, and general mood/ optimism (Bar-On, 2000). Daniel Goleman, the author of the best selling novel, *Emotional Intelligence* (1995), defined emotional intelligence as social and self-awareness, self-management, and social skills, such as leadership and conflict management skills. According to Goleman (1995), emotional intelligence is an important predictor of one’s occupational success, particularly once he/she has entered the work environment.

Differences in definitions have led to inconsistency in the literature and, as a result, inconsistency in the way in which emotional intelligence is measured. As the title of one article on the topic suggests, emotional intelligence has become somewhat of an elusive construct (Davies, Stankov, & Roberts, 1998). There is still a good deal of debate over whether or not emotional intelligence meets the criterion for an actual intelligence (Ciarrochi, Chan, Caputi, 2000; Mayer, Caruso, & Salovey, 1999; Murensky, 2000) or is a function of personality (Higgs, 2001; Murensky, 2000; Petrides & Furnham, 2001; Sjoeborg, 2001). The debate is often fueled by contradictory research findings. These differences appear to be due in part to differences in measurement tools and the authors’ definition of the emotional intelligence construct. Due to this inconsistency, cross study

comparisons are difficult and generalizations of findings are at best made cautiously. However, a pattern that appears to be emerging in the literature is that ability based measures of EI share more variance with measures of cognitive ability, such as the Scholastic Aptitude Test, while self-report measures of EI appear to be more similar to personality measures, such as the 16 Personality Factor Test (O'Conner, manuscript under review).

Hypothesis 1: EI Change and Development

In addition to the lack of clear definition and operationalization of the construct of EI, there is also a paucity of research regarding the nature of emotional intelligence development and the extent to which it can change or be learned over time (Boyatzis, 2001). Despite a proliferation of programs, popular books, and general interest on the subject of improving one's emotional intelligence, very little research has been done on evaluating the success of emotional intelligence programs and programs intended to improve one's emotional competencies (Goleman, 1995). Thus, the extent and conditions to which emotional intelligence can be taught is unknown. The success observed in other training programs, such as stress management and empathy training workshops have demonstrated some promise in teaching emotional control and understanding (Cherniss, 2001). However, these changes have not been observed using the standard measures of emotional intelligence used today and thus, claims made about the effectiveness of emotional competencies training and EI improvement cannot be made with confidence.

To address this issue further, consider graduate training programs in counseling. At its core, EI has been associated with abilities such as empathy, interpersonal efficacy, and self awareness; characteristics that are valued in counselors and graduate students in

counseling programs (Hackney & Cormier, 1996). Counselor instructional programs and textbooks have traditionally emphasized the importance of self-awareness, empathy, and dealing with emotional material (Truax & Mitchell, 1971). Corey (1994) stated that a personal characteristic of an effective counselor is an expanded awareness of the self and others. According to Corey, “therapists can not hope to open doors for clients that they have not opened for themselves (p.18)”. He added, “I strongly endorse some form of personal exploration as a prerequisite to counseling others (p. 15)”. This idea appears to have considerable commonality with Mayer, Salovey, and Caruso’s idea that EI involves the ability to perceive and understand the emotions in self and others (Mayer, Salovey, & Caruso, 2002). Theorists have also described the importance of working with emotional material in therapy. For example, Gestalt theorists suggest that one of the goals of the therapist is to assist client in gaining awareness of moment-to-moment experience, particularly his or her emotional experience (Corey, 1994). Again, this echoes Mayer and colleagues who also define EI as the ability to facilitate and manage emotional material in others and in one’s self (Mayer, Salovey, & Caruso, 2002). Yet, despite its relevance to counselor training, this area has not been explored in relation to EI development. Because of the similarities made between EI and counseling instructional emphases, I hypothesized that exposure to graduate training practicum and socialization into the program philosophy would increase one's level of emotional intelligence.

An examination of this first hypothesis would have merit in that we may be able to better understand the malleability of emotional intelligence, the conditions with which this change occurs, and a proximal time frame that change may occur (the current study looks at changes over the course of one academic year).

Of further importance would be the extent to which an ability-based EI measure (the Mayer-Salovey-Caruso Emotional Intelligence Test (Mayer, Salovey, & Caruso, 2002), or MSCEIT in the current study) and a self report EI measure (as represented by the Emotional Intelligence Scale in this study (Schutte, Malouffe, Hall, Haggerty, Cooper, Golden, & Dornheim, 1998)) changed throughout the year. Researchers have theorized that self-report and ability measures of EI are quite different in terms of what they measure (Cherniss, 2000), with self-report measurements targeting perceived traits or personal qualities while abilities tests would measure demonstrated skills in a particular area (www.cjwolfe.com). This makes comparisons between studies difficult. By including both self-report and abilities measures, I may be better able to understand the extent to which the EI measures are actually measuring the same or similar constructs.

Hypothesis 2: EI as a Predictor of Performance

A further area of concern involves the extent to which emotional intelligence is actually related to future life success, occupationally and otherwise. Studies that compare emotional intelligence with future life success have received mixed results. Some researchers suggest that emotional intelligence predicts future professional success above and beyond what can be predicted by cognitive ability measures and personality (Schutte et al., 1998). However, other studies found that emotional intelligence is not significantly related to future performance success, while cognitive and personality scales were more successful at explaining the variance of future performance (O'Connor & Little, manuscript under review). The primary reason for these differences appears to lie in the different definitions of success criteria and the conceptualization and measurement of the

emotional intelligence construct. For example, O'Connor (manuscript under review) had found that neither ability nor self-report measures predicted academic success above and beyond what was already predicted by a cognitive ability test and a personality assessment. However, the criterion for success was limited to Grade Point Average. This and other criteria for success are narrow definitions for performance and other assessments are also important, such as supervisor evaluations. By using broader criterion of performance success, the predicted influence of emotional intelligence may be better understood.

A master's level counselor training program often uses supervisor's ratings to augment course work GPA in order to assess a student's performance in the program, particularly in the student's clinical work and professional development. By offering a more broad-based measure of academic performance, one may be better able to determine the influence of emotional intelligence on future success in the program and thus, the unique contribution of the EI measures may be more accurately identified when cognitive and personality factors have already been accounted for.

Given this rationale, my second hypothesis was that both EI ability and self-report measures would explain variance in counselor performance evaluations not otherwise explained by personality and cognitive ability. Proponents of both ability and mixed models (self report) of EI assert that EI is predictive of future success. Thus, it is hypothesized that both the EIS and MSCEIT scores will be related to performance ratings, based on theoretical expectations outlined above (Goleman, 1995).

The examination of this hypothesis is important in terms of understanding the predictive validity of the EI construct. Specifically, the relationship between EI and

future performance needs to be better understood in order to seriously accept EI as an important and practical construct for researchers and professionals. Additionally, we need to better understand which EI measures are better predictors of job/ academic success and why. Without this knowledge, Time magazine's claim that EI is "the best predictor of success in life" remains an empty promise. According to Bedwell (2002), "if measures of emotional intelligence cannot predict additional variance in these outcome variables, its usefulness as a distinct construct is limited (p. 2)".

Given the two primary hypotheses of the current study, Chapter Two will focus on describing and critiquing the literature regarding emotional intelligence. This literature can be divided into eight primary areas, including (1) general intelligence, (2) emotions and personality, (3) models and measures of emotional intelligence (ability and mixed/self-report), (4) self-report versus ability, (5) emotional intelligence change and development, (6) age and cultural differences, (7) emotional intelligence and school/ job performance, and (8) emotional intelligence as a predictor of performance in counselor training.

CHAPTER II

LITERATURE REVIEW

The purpose of this chapter is to overview the current status of the emotional intelligence construct within the psychological literature. Included in this overview is a discussion of professional and cultural views of intelligence and how the definition of intelligence has evolved over the last century. The construct of emotional intelligence is then discussed in detail, including how research, theory, and clinical application of emotional intelligence have progressed since the construct's inception. It is my intent that this broad discussion will provide a context from which I may address, and from which the reader may understand, the current concerns regarding measurement issues, construct examination, and finally the development and training of emotional intelligence.

Intelligence

Although the idea of emotional intelligence has received a considerable amount of professional attention over the past decade, the task of understanding intelligence and what it means to be intelligent have been areas of concern for centuries. Sternberg (2000) organizes various conceptions of intelligence into two groups: lay conceptions (western cultural idea and non-western thought) and "expert" conceptions. Lay conceptions involve the way in which individuals in their worldview understand and define what intelligence means. Expert conceptions refer to the definitions of intelligence ascribed by

scientists and other professionals whose involves examining and assessing human intelligence.

Lay conceptions. Folk or “lay people’s” notions of intelligence carry a long and rich history that is in part influenced by their culture. In studying western societal notions of intelligence, Sternberg and colleagues (Sternberg, Coring, Ketron, & Bernstein, 1981) identified three factors that American participants described as the ideally intelligent person. The first factor, practical problem solving, included behaviors such as logical reasoning and seeing all aspects of a problem. The second factor, verbal ability, included behaviors such as speaking clearly and articulately, and conversing well. The third factor was labeled social competence and included behaviors such as accepting others for what they are, admitting mistakes, and displaying interest in the world at large (Sternberg, et al, 1981). These results were replicated in a later study (Sternberg, 2000).

Western ideas of intelligence appeared to differ in some respects from other cultural viewpoints. For example, the Taoist tradition emphasizes the importance of humility, freedom from conventional standards of judgment, and full knowledge of oneself and external conditions (Yang & Sternberg, 1997a). Taiwanese concepts of intelligence were studied and five underlying factors were identified: a general cognitive factor; interpersonal intelligence; intra-personal intelligence; intellectual self-assertion; and intellectual self-effacement (Yang & Sternberg, 1997b). Ruggis and Gugoreko (1994) suggested that, in Africa, conceptions of intelligence involve skills that facilitate harmonious and stable inter-group relations. Intra-group relations are also considered important. Sternberg (2000) observed that “in Zimbabwe, the word for intelligence, “ngware”, actually means to be prudent and cautious, particularly in social relationships

(p. 7)”. This emphasis on social and emotional competencies in intelligence extends to minorities within North America as well. Okagaki and Sternberg (1993) examined concepts of intelligence among different ethnic groups in California. The examinees found that Latino parents tended to emphasize the importance of social competence skills whereas Asian and Anglo parents emphasized cognitive skills. Moreover, in looking at the school performance of the participants’ children, the examiners observed that the teachers tended to reward those who were socialized into a view of intelligence that happened to correspond to the teachers’ own. Thus, Latino children whose parents valued social skills over cognitive skills general performed at a lower level in school than did the other children.

Expert Conceptions. Although many philosophers and academicians had grappled with the idea of intelligence and the mind for centuries, the modern era of human intelligence research and assessment began in the late 1800s and early 1900s. In 1904, Spearman developed a theory of intelligence after observing high correlations among cognitive tasks in research subjects. He postulated that there must be one common intellectual ability that accounts for performance in various areas of ability. He called this general intelligence “g” and labeled the variance around the g as “s”, or specific abilities. However, Spearman did not elaborate on these “specific communities” or performance variances from the “g”. Raymond Cattell elaborated on the “g” notion, dividing it into two distinctive g components: fluid and crystallized intelligence. Fluid intelligence is biologically based and decreases over the life span. Crystallized abilities were educationally and culturally influenced intelligences and did not decline over the lifespan (Brody, 2000).

Alfred Binet developed the first intelligence test and published a paper in 1905, which was organized around the identification of an overall “g”, later to be regarded as general or full scale I.Q. Later revisions to the Binet tests and the competing Wechsler tests would include subscales and general measures of verbal and performance I.Q.’s, which, when combined, would constitute one’s general ability (Davidson & Downing, 2000). The I.Q. test became well received in the community, from which one leading “expert” at the time asserted that “intelligence is what tests of intelligence test” (Boring, 1923, as cited in Sternberg, 2000). However, in the twilight of his career, Binet began to grapple with the meaning of intelligence measurement, stating that intelligence is a process directed toward an understanding of the external world (as cited in Brody, 2000). David Wechsler, a leading authority in intelligence measurement, further wondered whether affective and motivational abilities were admissible as general intelligence. He concluded that they were. However, this wealth of potential intellectual ability did not and still does not appear on Wechsler’s intelligence tests (Mayer, Salovey, & Caruso, 2000).

In 1983, Howard Gardner proposed that there are many different types of intelligences that do not have a single unifying dimension, but that can work together within a domain (Davidson & Downing, 2000). Three of his identified intelligences are related to conventional notions such as linguistic, logical/mathematical, and spatial. However, Gardner also recognized other areas of intellectual ability, such as musical, body/kinesthetic, intrapersonal, interpersonal, and naturalist, or understanding patterns related to the natural environment. Gardner further regarded traditional paper and pencil tests as inadequate assessments of overall intellectual ability and that observations and

tasks in the real world are the best way to assess an individual's abilities (Chen & Gardner, 1997).

Emotion and Personality

Emotions. Crider and colleagues (1989) defined emotion as an excitatory state that includes three components: a characteristic feeling/ subjective experience, a pattern of physiological arousal, and a pattern of overt expression. Goleman (1995) further described emotion as "a feeling and its distinctive thoughts, psychological and biological states, and range of propensities to act (p.289)." He stated that emotions can be conceptualized as families or emotional dimensions that have an emotional core or nucleus, such as anger, sadness, fear, enjoyment, love, surprise, disgust, and shame. He further added that beyond this core lies one's mood (e.g. grumpiness), then temperament (e.g. cheery disposition), and finally, emotional disorder (e.g. clinical depression or anxiety).

Personality. As emotion speaks to personal states, one's personality typically refers to enduring traits or characteristics. Crider and colleagues (1989) defined personality as "the unique patterning of behavioral and mental processes that characterize an individual (p. 471)". People have discussed the nature of personality for centuries. The modern study of personality considers a number of basic questions: What are the basic qualities of people in general and how do people differ regarding these qualities? In the last century, a number of differing views of personality have emerged and various ways to measure one's personality qualities or traits also appeared.

One such instrument was developed by Raymond Cattell who identified sixteen basic personality traits from participant responses on a self-report questionnaire (Russell

& Karol, 1994). He examined the trait lexicon developed by Allport and Odbert (1936, as cited in Russell & Karol, 1994). These researchers compiled a list of 18,000 adjectives that describe a person's character and personality. Cattell was interested in identifying the traits that people share and that make them different. Using the trait lexicon and including his own information, he used factor analysis to organize and assess these traits. Cattell identified two different kinds of traits, surface traits and source traits that underlie the human personality. Surface traits are consistent patterns of behavior while source traits are deeper and give rise to the surface traits. Cattell identified 16 basic source traits that underlie individual differences in behavior. The source traits or primary factors as they would later be called, include warmth, reasoning, emotional stability, perfectionism, and openness to change, among others. His personality questionnaire, the 16 Personality Factor Inventory, reflects his organizational work (Crider et al., 1989). Current editions of the 16 PF include five global factor scales that combine related primary scales. These consist of extraversion, anxiety, tough-mindedness, independence, and self-control.

Other personality models, such as the five-factor model developed by Costa and McCrae (1992) organize personality traits in a similar manner. In this model, five personality domains are introduced and include extraversion, neuroticism, openness to experience, agreeableness, and conscientiousness. These five domains are similar in definition to the global factors identified in the 16 PF and the two measures correlate highly with one another (Russell & Karol, 1994). Both the 16 PF and the five factor model are popular and widely used models of personality (Anastasi & Urbina, 1997).

Intelligence and Personality. Zeidner and Matthews (2000) observed that the constructs of intelligence and personality are often kept apart in modern psychological

thought. However, they further observed that many of the leading intelligence theorists and scholars have maintained that a relationship exists between personality and intelligence. The authors added that intelligence is often identified as the cognitive part of personality and that affective factors function with intelligence to determine intellectual performance. They offered that "test situations may evoke arousal and negative emotions that impact on test performance, affecting the inferences that may be drawn about intelligent behavior (p.582)." In a famous longitudinal study by Terman and colleagues (Terman & Odin, 1947), 1,528 academically gifted children were followed into late adulthood. Physical, mental, and personality traits were examined throughout this period and these children were seen by their teachers as being more "self-confident", "optimistic", and "emotionally stable" than a control group. When the subjects reached adulthood, the gifted experimental group was equal to or superior to the control group in marital satisfaction. Moreover, the "gifted" participants showed normal to below normal levels of personality maladjustment. Zeidner and Matthews (2000) further postulated that individuals who have poor intellectual performance and repeated failures in academic settings may also have certain personality traits and pervasive emotional expressions. According to the authors, "Poor cognitive performance and repeated failure in school and social settings may indirectly lead to problems of social adjustment and rejection. This in turn, may influence both the development and expression of certain personality traits (p. 591)." In this way, cognitive performance influences success in the academic/ workplace, which then contributes to personality and emotional characteristics of the individual.

However, other professionals (Bar-On, 2000; Goleman, 1995; Mayer, Salovey, & Caruso, 1990) are currently challenging this explanation of the personality- intelligence

relationship in future success. They assert that certain personal characteristics, collectively known as emotional intelligence, influence one's future success in work settings. Moreover, emotional intelligence is claimed to be a stronger predictor of future performance success than “traditional” intelligences (Goleman, 1995). However, the nature of what emotional intelligence actually is remains elusive and a point of contention among theorists and researchers.

The Beginnings of Emotional Intelligence Theory and Research

Within the past decade, the idea of emotional intelligence has become the subject of popular books, newspaper articles, television programs, and magazine reports (Mayer, 1999). This interest peaked in 1995 with the release of Dr. Daniel Goleman's book, “Emotional Intelligence”. Time magazine proclaimed emotional intelligence to be perhaps the best predictor of success in life (Gibbs, 1995). Despite these grand claims, there is a certain amount of disagreement among professionals in explaining what emotional intelligence actually is. The phrase, “emotional intelligence”, was first coined in the scientific literature by Mayer and Salovey (1993), where they explored the connection between cognition and emotion. These researchers observed that a group of mental abilities existed in individuals who are able to reason and problem solve while taking emotions (self and others) into account. They identified a connection between emotion and intelligence and devised a theory and model for abilities referred to collectively as “emotional intelligence” (Mayer & Salovey, 1993). During this time, Reuven Bar-On began to study what he considered to be a related group of inter and intra-personal competencies that he believed lead to psychological adjustment and well-being in individuals. He later used the term emotional intelligence to describe these

competencies. Since then, a number of researchers have offered various models and measures of emotional intelligence that have organized into two broad areas: ability models and mixed models (Mayer et al, 2000).

Ability Model of E.I.

Mayer and colleagues (Salovey & Mayer, 1990) initially developed their model of emotional intelligence based of specific ability areas. According to the model, emotional intelligence, or E.I., can be divided in four areas: emotional perception and identification, emotional facilitation of thought, emotional understanding, and emotional management (Mayer et al., 2000). Emotional perception involves a person's ability to observe, attend to, and process emotional signals, such as facial expressions, voice and body gestures, and artistic/cultural objects. Emotional facilitation, the second area, is concerned with the influence of emotions in self and others and how emotion affects cognition. The impact of emotion on cognition has been studied extensively (Beck, 1999) and the influence of emotion on one's cognitive state has been observed in both theory and practice.

The third area involves emotional understanding and reasoning. According to the authors, "emotional signals about relationships are understood, along with their interactive and temporal implications" (p. 108). This area concerns the ability to analyze blended or complex emotions as well as one's understanding of the way in which emotional reactions proceed over time (Mayer, Caruso, & Salovey, 2000). The fourth phase involves the success in which one manages emotions and copes with states of mood instability, which requires the earlier three areas of emotional intelligence. Mayer and colleagues (2000) added that emotional management describes how a person understands the emotional dynamics and progressions in her/his relations with others.

“Emotional intelligence”, as defined by Mayer and Salovey (1997), can be summarized as “the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote educational and intellectual growth (p.5).”

The authors asserted that their model can be characterized as a mental ability model, as reflected in their emotional intelligence assessment instruments discussed below.

Ability Measures of E.I.

Mayer, Salovey, and Caruso developed a few emotional intelligence assessments based on their ability model of E.I.: The Multifactor Emotional Intelligence Scale, or MEIS (Mayer, Caruso, & Salovey, 1997), and their most recent product, the Mayer, Salovey, and Caruso Emotional Intelligence Test, or MSCEIT (Mayer, Salovey, and Caruso, in press). The MSCEIT is discussed in greater detail in the methods section of this proposal. The MSCEIT and its predecessor, the MEIS, evolved out of the idea that emotional intelligence involves problem solving with and about emotions. Both tests follow the developers’ initial model using the four branches discussed earlier.

Mixed Models

Other theories of emotional intelligence have been offered since Mayer and Salovey (1990). Hedlund and Sternburg (2000) viewed two groups of emotional intelligence theories; the first is the ability to perceive and understand emotional information to which Mayer and Salovey adhere to, and the second group includes in their definition almost everything related to success that is not measured by IQ. These can be defined as mixed models and are identified through the work of Goleman (1995) and Bar-On (1997). For example, Goldman (1995) included achievement drive,

optimism, self-confidence, conscientiousness, and an array of other variables in his description of emotional intelligence. Sternberg (1999) argued that, in this model, a great portion of the residual variance in an individual beyond IQ would be accounted for by emotional intelligence, due to the scope of the definition itself (personality traits, motivation, etcetera).

Bar-On (1997) believed that it is impossible to separate the various forms of non-cognitive intelligences, and developed a model of emotional intelligence that incorporates social and practical intelligence, including five broad areas of skills or competencies: interpersonal skills, intrapersonal skills, adaptability, stress management, and general mood. His model of emotional intelligence grew along with his assessment instrument, the Emotional Quotient Inventory, or EQ-I (2000). According to the author, his initial intent was to examine key components of effective emotional and social functioning that leads to psychological adjustment and overall well-being.

Mixed Model Assessments

The most commonly used mixed model assessment is Bar-On's own EQ-I, a self-report measure that reflects his EI model. Using exploratory and confirmatory factor analysis procedures, Bar-On (2000) identified ten key components of emotional intelligence: emotional self-awareness, assertiveness, empathy, interpersonal relationships (also called social skills), stress tolerance, impulse control, reality testing, flexibility (adjustment to different situations and less rigid thinking), and problem solving. On this last component, Bar-On offered that it may be important to understand emotions in order to solve problems effectively. Bar-On also identified facilitators of emotional intelligence, or items that contribute to or foster one's emotional intelligence

without necessarily being a component of the construct itself. These facilitators were comprised of self-actualization (the ability to realize one's potential), optimism, happiness, independence, and social responsibility. According to Bar-On, "not only do these factors correlate significantly high with emotional and intelligence, but they tend to facilitate one's overall ability to effectively cope with daily demands and pressures (p. 385)." Bar-on concluded that emotional and social intelligence is at its essence an interrelated collection of emotional, personal, and social characteristics and abilities that influence one's overall ability to cope with the demands and pressures of daily life.

However, Mayer (2000) considered Bar-On's model to be much too broad and that the inclusion of personality and emotional traits, such as empathy and assertiveness, would exempt a model from being a true model of intelligence. He has argued that emotional intelligence should be distinct from personality characteristics or else it should not be considered a model of intelligence. The characteristics identified by Bar-On and others may result from high emotional intelligence, but, according to Mayer, they should not be considered part of its definition.

Other Self-Report Measures

Following Mayer, Bar-On, and Goleman, a number of researchers have developed, published, and marketed their own emotional intelligence tests. Many of the tests borrow loosely from the Mayer, Salovey, and Caruso definition while adhering to the self-report style used in Bar-On and Goleman's assessments. One such instrument is the Emotional Intelligence Scale developed by Schutte, Malouffe, Hall, Haggerty, Cooper, Golden, and Dornheim (1998). The intent of the test developers was to combine the conceptual idea by Mayer and colleagues with the administrative ease of self-report

measurement. The assessment has proven promising in initial studies, demonstrating sound psychometric characteristics that will be further described in the methods portion of this proposal. However, the use of self-report measures in measuring emotional intelligence in general has been met with criticism.

Self-Report versus Ability Measures

As indicated, many of the emotional intelligence assessments available rely on self-report measurement, including the EQ-I and others. However, Mayer and Salovey (1997) maintained that, if one is to define the construct of emotional intelligence as a type of intelligence, then it is important to use tests that directly measure this construct. These ability tests would more closely follow the traditional ability and cognitive measures available today. Davies and colleagues (1998) further argued that, if emotional intelligence is to qualify as a form of intelligence, it is important to demonstrate its uniqueness and independence from other personality and emotional characteristics, which are often measured through self-report instruments, thereby decreasing unnecessary measurement redundancy with other constructs, such as personality and emotions. To test their assertion, the investigators recruited 100 first year university students from the University of Sydney to test the distinction between personality and emotional intelligence measures. Participants completed thirteen self-report measures and subscales and five objective indices that, according to the authors, reflected the definition purported by Mayer and Salovey (1990).

The self-report questionnaires consisted of the trait-meta mood scale (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995), the Toronto Alexithymia Scale (Taylor, Bagby, Ryan, Parker, Doody, & Keefe, 1988) the Emotional Control Questionnaire

(Roger & Neshoever, 1987), the Questionnaire Measure of Emotional Empathy (Mehrabian & Epstein, 1972), the EQ test (Davies, et al, 1998), and the Affective Communication Test (Friedman, Prince, Riggio, DiMatteo, & Robin, 1980) . The objective tests consisted of the Self-Awareness Questionnaire and the Emotion Perception Tests, an early version of the MEIS and MSCEIT (Mayer & Salovey, 1997). The participants also completed the Eysenck Personality Questionnaire (Eysenck, 1975), which contains four scales: psychoticism, extraversion, neuroticism, and dissimulation.

Using factor analysis, Davies and colleagues (1998) observed that self-report measures of emotional intelligence tended to load on to the personality factors consisting of neuroticism, psychoticism, and extraversion. The objective measures by contrast loaded on to distinct factors, designated as emotional awareness and emotional perception. The researchers conclude that the self-report measures are not providing anything that is not already explained by established measures of personality.

In a second study, Davies and colleagues (1998) examined the responses from 40 first-year psychology students in Australia. The participants were administered the same 13 self-report questionnaires as outlined above, along with the Trait-Self Description Inventory (Christal, 1994) a measure of the “big five personality traits, a mood measure, and the Myers-Briggs Type Indicator (Myers, 1962). The examiners found that the self-report emotional intelligence results were related to Neuroticism, Psychoticism, Extraversion, and Agreeableness. However, Openness and Conscientiousness were not significantly related to emotional intelligence. The authors contended that, based on the various definitions of emotional intelligence provided by Mayer, Salovey, and others, one would have expected closer relationships with openness and conscientiousness. However,

this was not observed. The authors concluded that self-report questionnaire measures are related to personality measures but not to the dimensions expected given the definition of EI (Davies et al., 1998).

Murensky (2000) added that emotional intelligence, as identified with self-report questionnaires, does not provide much unique contribution to the prediction of organizational performance when personality factors are already considered. The author administered the Emotional Competence Inventory (Boyatzis, Goleman, & Rhee, 2000) and the NEO-PI inventory (Costa & McCrae, 1992) to managers in high-level leadership positions. The Emotional Competency Inventory (Goleman, 2000) is a self-administered assessment instrument that assesses self-awareness, self-management, social awareness, and social skills. In comparing participant responses on both assessments, Murensky found that the ECI had strong overlap with most of the NEO-PI dimensions and contributed only a minimal amount of variance above the NEO-PI in predicting the participant's responses to an organizational effectiveness measure. Thus, according to the authors, emotional intelligence, as measured by the ECI, contributes little to the variance that is not already explained by the NEO-PI.

Ciarrochi, Chan, and Caputi (2000) evaluated the EI construct using the Multi-factor Emotional Scale, or MEIS. An earlier version of the MSCEIT, the MEIS is an abilities based test of emotional intelligence, which means that it is based on actual performance as opposed to self-rated performance as we have seen in the earlier studies. The authors were interested in examining whether or not ability based EI relates to important criteria after controlling for personality variables and IQ. The criteria used were measures of relationship quality, life satisfaction, and parental warmth. One

hundred thirty-four Australian undergraduate students were administered the MEIS, and among those participants, 120 completed the Raven's Standard Progressive Matrices Intelligence test and were exposed to mood induction procedures, while 114 participants completed the MEIS along with measures of empathy, life satisfaction, parental warmth, extraversion, neuroticism, openness to feelings/ aesthetics, relationship quality, and self esteem. The mood induction procedure included one of three films: a comedy, a film on architecture, and a film on death and holocaust. Analyses were conducted with EI, relationship quality, and life satisfaction, controlling for IQ and personality variables (empathy, extraversion, neuroticism, openness to feelings, and self-esteem). The results indicated a significant relationship between overall EI and relationship quality and life satisfaction, $p < .05$. Participants were asked how they felt after the test (Mood) and were asked to make evaluative comments. The task was to determine the extent to which negative mood biased one's judgment about others. The examiners found that the Mood X EI interaction was significant, $p < .01$, when controlling for self-esteem, neuroticism, and extraversion, while the interaction effects of mood with each of the latter variables was not significant. The authors concluded that the EI construct, as measured by an ability-based measure, is distinctive and useful in describing life satisfaction, relationship quality, and mood management.

Mayer and colleagues (Mayer, Salovey, Caruso, & Sitarenios, in press) have recently summarized their position on the ability versus self-report issue, stating that ability models/ measures are something relatively different from self-report scales of emotional intelligence. The authors stated "the ability to solve emotional problems is a necessary, although not sufficient, ingredient to behaving in an emotionally adaptive way

(p.3)." Thus, despite the controversy over the relative usefulness of self-report questionnaires, there appears to be room for both self-report and non-self-report assessments in identifying and measuring emotional intelligence.

Emotional Intelligence Change and Development

A paucity of information exists in the literature regarding the nature of EI development in individuals. Researchers have observed that emotional intelligence tends to increase with age (Bar-On, 2000, Bedwell, 2002, Mayer, Salovey, & Caruso, 2002). In an effort to create normative data for his emotional intelligence assessment, Bar-On (2000) administered his Bar-On EQi self-report instrument to nearly 4,000 participants in the United States and Canada. He found that older groups scored significantly higher than younger groups, suggesting that emotional intelligence, as measured by the Bar-On instrument, increases with experience. Bedwell (2002), in collecting psychometric data for his EI assessment, the Emotional Judgment Inventory, found that individuals 40 years of age and older tended to score higher than a younger adult group, with an effect size equal to or greater than .5.

Despite the demonstrated phenomenon that EI increases with age, few researchers have attempted to explain the nature of emotional intelligence growth and development. Sharfe (2000) summarized the literature on emotional development, stating that individuals gradually develop a more sophisticated understanding of emotions. She stated that infants in the first days of life can discriminate between happy, sad, and surprised facial expressions. She explained that "after repeated presentations of maternal joy, infants gradually changed from imitating maternal expressions of joy to increased expressions of interest or excitement. This change in emotional state supports the notion

that the infants are not merely imitating features but recognizing the emotions of others (p.249)". Sharfe also described developmental differences between boys and girls in terms of emotional regulation. After a literature review, Sharfe explained that girls tended to be better at masking emotions than boys. Girls smiled more than boys when presented with a disappointing gift and smiled more within social versus nonsocial contexts. Sharfe added that, in adulthood, emotional and social goals become more salient and thus adults improve their ability to regulate their emotions.

Little to no research has been found to support the successful conditions that facilitate emotional intelligence change; however, a number of professionals have discussed the issue. Boyatzis (2001) acknowledged that "many researchers of this concept contend that a person can develop the characteristics that constitute emotional intelligence. But few have taken the time to rigorously evaluate change efforts (p. 234)." Cherniss (2000) observed that a number of strategies have been employed in the workforce to promote emotional competence, such as t-groups (groups that discuss themselves, relationships, group processes, and their place in the larger social system), stress management training, communication and empathy training, conflict management, and self-management training, but little effort has been made to test the effectiveness of these strategies.

An exception to the lack of research in the area is the work of Kramer, Ber, and Moore (1989), who evaluated a program designed to promote emotional and social competence in physicians at a pediatrics ward in Israel. The participants in their study were fifth-year medical students who were currently interning at the hospital. Training consisted of 10 ninety-minute meetings held twice weekly for five weeks. Each meeting

was structured around a particular topic (e.g. patient history taking, family counseling, or crisis intervention). Activities in the meeting involved role-plays and observation of interviews with live patients. A control group did not receive the training. Results supported the notion that the training increased the emotional and social competence in interns, as measured in supportive behaviors during actual interviews and as recorded by independent observers. Students in the control condition did not show improvement, and, in fact, demonstrated a reduction of supportive behaviors. Researchers have demonstrated that there are age differences related to EI, suggesting that EI increases with age. However, there is little theoretical or empirical information to describe the process of EI change over time. In terms of facilitating change, the research that does exist appears promising (Kramer, Ber, & Moore, 1989); yet there is little evidence to suggest that specific components or conditions exist that may ameliorate EI development and growth.

Cultural and Gender Differences in Emotional Intelligence

In an effort to create normative data for his emotional intelligence assessment, Bar-On (2000) administered the Emotional Quotient Inventory (EQ-I) on nearly 4,000 participants in the United States and Canada, with 49 percent males, 51 percent females, 79 percent white, 8 percent Asian, 7 percent African American, 3 percent Hispanic, 1 percent Native American, and 2 percent other. There were no observed differences between the various ethnic groups on emotional Intelligence scores, which is surprising considering the observed between-group differences typically found in IQ and other traditional assessment tools (Groth-Marnat, 1999). Mayer, Salovey, and Caruso (2002) administered the MSCEIT to a normative sample consisting of 71% White, 3.8% Asian, 12% Black, 12% Hispanic, and .8% other ethnicity. Overall, the researchers found only

modest differences between ethnic groups, with the largest difference explaining only 6.7% of the variance. Such findings suggest that EI may represent a less culturally biased measure of ability (especially as compared to IQ). If this is indeed true, and if EI does indeed predict future work or graduate school performance, the use of EI measures for hiring/admission criterion could provide a more valid (less culturally biased) means for selection committees to make their judgments. However, at this point such an assertion is nothing more than speculation based on the theoretical (and not empirical) writings of EI researchers.

Gender differences have also been observed in emotional intelligence data. Women were reported as being more aware of emotions, demonstrated greater empathy, related better interpersonally, and acted more socially responsible than men. Murray (1998) reported that similar results were observed when the Emotional Intelligence Inventory was administered to 4,500 men and 3,200 women in a different study. These findings are in agreement with the notion that women are more in touch with their emotions and have better interpersonal skills than men (Cavallo & Brienza, 2003).

One potential utility of EI as a construct is that appears to either favor or not discriminate against disenfranchised groups, which is quite different from other traditional psychological measures (Groth-Marnott, 1994). Unfortunately, limited research and inconsistent methodologies have narrowed our understanding in this area. Given that ethnic minorities, women, and older populations have histories of discrimination (particularly in terms of occupational success), it would be important to note the extent to which EI predicts success in these groups.

Emotional Intelligence and Job or School Performance

The popularity of emotional intelligence is due primarily to the strong claims made by Goleman (1995) and others (Cherniss, 2000) who maintain that emotional intelligence is a better predictor of future success than traditional cognitive measures. Goldman (1995) offered that abilities related to emotional intelligence may play a significant role in future success not accounted for by IQ or other standard cognitive ability tests. These abilities include impulse control, delayed gratification, and emotional awareness and regulation. Goldman added that, although emotional intelligence is a new concept, existing data suggests that emotional intelligence can play a powerful role in one's future successes at work or in the rest of his/her life.

For example, Graves (1999) examined the relationship between emotional intelligence and job-related success. He also looked at emotional intelligence as a distinct construct from IQ and the extent to which emotional intelligence predicted success not accounted for by IQ. He attempted to create a simulation of a work related selection process. One hundred and fifty participants, 50% men and 50% women, were given two cognitive skill tests, the Wonderlic Personnel Test and the Raven's Advanced Progressive Matrices, and an emotional intelligence test developed by Mayer, Salovey, and Caruso (1997, as cited in Graves, 1999). On another day, the participants were instructed to perform four job-simulated activities that were designed to act as analogues to actual work situations. Performance was assessed through peer and assessor ratings. Results revealed that emotional intelligence alone, as measured by the emotional intelligence test, predicted between 6 and 10% of the variance in job performance as rated by peer and assessors. Both the emotional intelligence and cognitive ability measures predicted

between 10 and 17% of the variance in peer and assessor ratings. The author concluded that emotional intelligence is correlated, yet distinct from cognitive intelligence. Based on the findings, Graves suggested that emotional intelligence considerations can increase the utility of the selection process in the work force.

Fox and Spector (2000) studied the relationship between components of emotional intelligence (empathy, self-regulation of mood, and self-presentation) and work success. In this study, success was defined as job interview performance. Participants were 116 undergraduate students from a Southeastern university in the United States. All participants participated in a 10-15 minute videotaped simulated job interview and played the role of the job applicant. The participants then completed the following questionnaires: the Wonderlic Personnel test (Wonderlic, 1992) and the Work Problems Survey (a measure of general and practical intelligence), the Trait-Meta Mood scale (a measure of emotional self-regulation and attending to the emotional information of others) (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995), the Interpersonal Reactivity Index (a measure of empathy and empathic understanding) (Davis, 1980), and the Positive Affect-Negative Affect Schedule (a measure of trait affect) (Watson, Clark, Tellegen, 1995). Interviewer judgments, which included decision to hire, perceived qualifications of the applicant, perceived similarity, and overall likeability of the candidates were also collected. The Investigators found that the interviewer's decision to hire rating was significantly predicted by the participant's perspective taking score, $r = 0.21, p < 0.05$, as well as by the general intelligence score and positive affect, $r = 0.23$, and $r = 0.32$ respectively. The mean Qualification of Candidate ratings were significantly predicted by the Trait-Meta Mood Scale ($r = 0.21, p < .05$) and perspective

taking ($r = 0.26, p < 0.01$). Interviewee likeability was predicted by empathy, $r = .19, p < 0.05$, while similarity was predicted by perspective taking, $r = 0.19, p < 0.05$. The authors conclude that components of emotional intelligence are associated with interview outcomes.

Hatzes (1996) investigated factors contributing to the academic outcomes of 20 adults with vocabulary-related learning disabilities who were enrolled a large research university; ten of whom completed their degree with the remaining ten leaving school. The Wechsler Adult Intelligence Scale – Revised and the SAT were employed to measure the participants’ verbal cognitive abilities and in depth interviews were conducted to identify factors that contributed to their academic outcomes. Surprisingly, verbal ability did not differentiate between the completers and the non-completers. However, abilities related to emotional intelligence, such as management of emotions and understanding emotions in self and others, were factors on which completers and non-completers diverged. Thus, emotional intelligence, as defined by Hatzes, was associated with completing school, while standard cognitive measures were unable to predict academic success (completion of schooling) in a group of adults with learning disabilities.

These findings (Fox & Spector, 2000; Graves, 1999; Hatzes,1996) add merit to Goleman’s (1995) proposition that traditional or cognitive intelligence may provide individuals with entry level success regarding a work setting, however, emotional intelligence determines an individual’s success once he/she has entered the work environment.

A number of researchers have examined the predictive power of emotional intelligence as it relates to school performance (O'Connor & Little, manuscript under review; Schutte, Malouffe, Hall, Haggerty, Cooper, Golden, & Dornheim, 1998). In one study, Schutte and colleagues (1998) used their own self-report measure of emotional intelligence, the Emotional Intelligence Scale (EIS), to examine whether scores on the emotional intelligence measure could predict success in an academic setting. (The psychometric properties of the EIS are discussed further in the methods section of this proposal.) Sixty-four first year university students completed the emotional intelligence measure during their first month in school. At the end of the year, the students' grade point averages were obtained.

The researchers found that scores on the emotional intelligence questionnaire significantly predicted grade point average at the end of that year, $r = .32, p < 0.01$. The researchers also used the participants' SAT scores as measures of "traditional" or cognitive intelligence and found that scores on the emotional intelligence scale were not related to the participants' SAT scores, $r = -0.06$. As expected from earlier studies, there was some relationship between the EI self-report measure and personality traits, as measured by the NEO-PI, particularly Openness to Experience, $r = 0.54, p < 0.009$. The authors asserted that EI, as measured using their scale, appears to have predictive validity in that incoming college students' emotional intelligence scores predicted their end-of-year grade point average.

A recent study by O'Connor and Little (manuscript under review) demonstrated much different results. Their intent was to demonstrate whether EI would be a better predictor of academic achievement when it is measured using an abilities measure of EI

or a self-report measure. The examiners used 90 introductory psychology students from a university in the mid-western United States, with 77% of the students ranging in age between 18 and 20 years old. The MSCEIT and the Bar-On EQi were used as ability and trait/ self-report measures of EI, respectively. The 16PF and ACT college entrance tests were used as discriminant markers for the EI assessments. Cumulative Grade Point Average based on a traditional 4-point scale was used as the criterion for academic success in this study. Participants completed the EI measures, 16PF, the MSCEIT, and a demographics sheet. The investigators collected cumulative GPAs after written permission was obtained by the students. Descriptive statistics were conducted. Results indicated that the EI measures had limited predictive validity. The MSCEIT total score did not correlate significantly with GPA and only one MSCEIT branch score appeared significant (Understanding Emotions, $r = .227$; $p < .05$). The EQi total score demonstrated a significant relationship with GPA ($r = 0.233$; $p < .05$). GPA appeared to correlate most strongly with ACT scores ($r = 0.389$, $p < .01$) but was not significant with any of the 16PF personality dimensions. The authors curiously conclude that emotional intelligence is not a valid predictor of academic success, despite the significant correlation between EQi and GPA. However, the correlation was not as strong as that seen in the study by Schutte and colleagues (1998).

The differences in results may be due to a number of variables. As observed with other studies on EI, the studies by O'Conner and Little and by Schutte and colleagues used different measures of EI, thus making inter-study comparisons difficult. Perhaps, the EIS does a better job at predicting academic success than the MSCEIT. And perhaps EI self-report questionnaires predict academic success better than the ability-based

measures. For example, recall that the relationship between EQi (a self report measure) and GPA was significant at a .05 level.

Finally, the criterion of success may be too narrow in that GPA was used as a “success measure”. Success is often determined by more than one score. For example, performance may involve supervisor evaluations, productivity, etcetera. Perhaps a multi-dimensional evaluative process regarding performance may provide more information regarding an EI – academic success relationship.

Overall, there appears to be mixed evidence for a unique relationship between EI and school/ job performance. A lack of agreement over EI measures and differing criteria may account for some of the difference. Thus, it will be important to incorporate different EI measures when investigating the relationship between EI and performance/ success.

Emotional Intelligence as a Predictor of Performance in Counseling

In discussing important characteristics for the health care field, Elam (2000) offered that “emotional intelligence appears to be a relevant, if not critical, ability in the patient care environment (p. 445).” In the field of counseling, there also appears to be some overlap between counseling effectiveness and dimensions of emotional intelligence. A widely held belief in psychotherapy practice is that an effective counselor is able to understand how and what the client is experiencing, a condition that Rogers referred to as empathy (Holdstock & Rogers, 1977). Hackney and Cormier (1996) identified eight qualities that are associated with effective counselors: self-awareness and understanding; psychological health; sensitivity to and understanding of racial, ethnic, and cultural factors in self and others; open-mindedness; objectivity; competence; trustworthiness; and interpersonal attractiveness. Included in self-awareness is an awareness of one’s own

feelings, and Hackney and Cormier warned that “counselors who do not understand their feelings may be more likely to project their feelings onto the client and not recognize the real source (p.16)”. The authors also warned that a lack of self-awareness may cause counselors to personalize and over-react to clients, and may act defensively. Emotional and interpersonal awareness are considered to be important therapeutic tools in building a counselor- client relationship. Hackney and Cormier maintained that a critical determinant in the maturing process of a therapeutic relationship lies with the counselor’s ability to recognize psychological dynamics, interpersonal assumptions, and the underlying emotions that are involved in the relationship.

Open-mindedness involves the accommodation of client feelings that may be different from the therapists. Emotional awareness is important in a counselor’s ability to remain objective in that he or she may be able to avoid developing inappropriate emotional feelings about or toward a client, often categorized as countertransference reactions. Latts (1996) compared scores from seventy-seven counselors-in-training on a measure of countertransference with supervisor ratings. The researcher found that countertransference scores were related to a measure of counselor effectiveness, as depicted by supervisor ratings, thus supporting the above notion. Williams (1998) compared counselor trainee characteristics and effectiveness by administering the Minnesota Multiphasic Personality Inventory-II, a counselor evaluation rating scale, and a family of origin scale to sixty-four counselors-in-training from a Master of Arts degree program and faculty supervisors completed the counselor evaluation for each participant. Williams found that counselor trainees who had difficulty establishing relationships, who

were socially awkward, and who were distant, were not as effective as counseling trainees that were social, well adjusted, and alert (including emotionally alert).

Van Lent (1998) assessed the effectiveness of a predictive tool for determining clinical success in counseling trainees. Although a number of the measure's subscales were not positively correlated with positive evaluations by faculty and supervisors, open-mindedness and sensitivity (including emotional sensitivity) were significantly related to evaluations by supervisors.

Based on the literature above, emotional intelligence appears relevant to the training and practice of counseling. Specifically, characteristics associated with emotional intelligence are frequently cited as being involved in or related to effective counselors and counselors-in-training. However, researchers have not explicitly built a bridge between counseling training and emotional intelligence with regard to performance in a counseling graduate program. Moreover, little to no research has been conducted on the dynamics of emotional intelligence, that is, the extent to which it changes over time. It is possible that, with the personal and professional growth that accompanies graduate level training in counseling, one's emotional intelligence may improve as well. Does emotional intelligence increase as one moves through a graduate level-counseling program? Graduate students often talk about the emotional and personal challenges associated with their development as graduate students and the heightened maturity and sensitivity that results from those challenges. In this way, counselor training may increase the students' emotional sensitivity and emotional competency.

Summary and Hypotheses

As demonstrated, there have been many different attempts at identifying and defining what it means to be emotionally intelligent. Relatedly, there have been different methods aimed at measuring emotional intelligence. Unfortunately, this inconsistency in the literature provides little or inconsistent information on emotional intelligence as a construct. As discussed earlier, one area that commanded the attention of the media was the idea that emotional intelligence predicted future success in the workforce (Cherniss & Goleman, 2000) and in one's personal life (Schutte, Malouff, Bobik, Costin, Greeson, Jedlicka, Rhodes, & Wendorf, 2001). Given the various methodologies and definitions, testing such a prospect would be fraught with difficulty and inconsistency. When studying the relationship and success, it would be especially important to use different measurement strategies to observe how the different measures behave in relation to success. As self-report and abilities based measures are the most frequently discussed measures in the field of EI, it would be important to include these measures in this study.

As discussed earlier, there are a number of definitions used to describe EI, some of which describe the construct as a collection of competencies that closely reflect personal traits (Bar-On, 2000) while other definitions focus on EI as an ability or set of skills (Mayer, Salovey, & Caruso, 2002). Given the range of definitions available, it will be particularly important to adhere to a clear and specific definition of EI, and to use measures that were developed to reflect a specific construct definition (DeVellis, 1991).

The literature suggests that individuals who are older (40 years and over) tend to have higher EI than individuals who are younger (BarOn, 2002; Bedwell, 2002). It would be reasonable to assume that, controlling for cohort effects, people tend to become

emotionally smarter as they get older, thus, implying a natural developmental course. This further suggests that, contrary to the opinions of a few researchers (McCrae, 2002), EI is not a static condition. Rather, EI appears to be dynamic and, potentially, malleable. The vast number of EI training workshops and consortiums are already very confident that EI is not static and that it can be trained (Cherniss, 2000). Research has demonstrated the potential benefits of training in terms of improving social skills and emotional competencies (Kramer, Ber, & Moore, 1989). Yet the research on emotional intelligence development and change has been scant if non-existent. However, if we are to work toward improving EI, then we may be best served understanding how this change takes and specifically what conditions are important when working toward EI growth.

These points need to be examined in order to better understand the construct of emotional intelligence. Until we have clearer evidence that emotional intelligence is indeed malleable, and is a predictor of success (particularly in a field where emotions are emphasized), addressing the development and characteristics of EI growth seems premature. In terms of counselor training, there appears to be a fair amount of overlap between effective counselor skills, such as empathy and emotional awareness (Hackney & Cormier, 1996), and emotional intelligence. By observing students as they progress through a counselor training program, it would seem logical that their level of emotional intelligence would improve along with their skills as a counselor. The environment of a graduate counseling program appears to be an appropriate and potentially informative environment to investigate the nature of EI development. As students are supervised in their practical experiences and evaluated based on their clinical skills, the context of a training program would also be a useful environment in which to observe the relationship

between emotional intelligence and success. In this case, success would refer to final clinical evaluation by the students' supervisors. Given this context, I hypothesize the following.

Hypotheses 1. Both EI ability and self-report measures will explain variance in counselor performance evaluations not otherwise explained by personality and cognitive ability. Both the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT - ability measures) and the Emotional Intelligence Scale (EIS - self-report measure) scores are expected to be related to performance ratings, based on the theoretical expectation that emotional intelligence is related to future performance success (Goleman, 1995).

Hypotheses 2. Master's level counselor training will influence one's emotional intelligence. Specifically, emotional intelligence would improve, above and beyond that of non-counseling graduate students, after the first year of training in a master's level counseling program. The changes will not be expected for students in a graduate program, such as accounting, where inter- and intrapersonal competencies are not as emphasized.

Implications

An examination of the hypotheses outlined above would have important implications for research and practice. First of all, demonstration of EI as a predictor of success in a counseling program would not only further support the utility of construct and the assumptions purported by Goleman (1995) and others, but would also demonstrate its generalizability into a different arena, namely counseling training. Second of all, demonstration of EI change over time in a counseling program would illustrate both the potential change dynamics of the construct and the conditions to which this

change occurs. Thus findings that support these hypotheses would also demonstrate that emotional intelligence training that incorporated counselor-training skills may be effective training avenues in EI. Moreover, by observing change and predictive success in both ability and self-report measures, we will have greater understanding of the extent to which these assessments diverge and/ or converge.

Finally, by investigating by the predictive utility and change potential of the emotional intelligence construct, we will be closer to expanding our notions of what it means to be intelligent and what contributes to competency and success, particularly in a graduate counseling program. By challenging our notions of ability and intelligence, we may be potentially moving away from the narrowly defined notion of intelligence purported by Boring (Sternburg, 2000) in that intelligence is more than just what traditional intelligence tests measure.

CHAPTER III

METHODS

Participants

Forty graduate students participated in the study. Participants were invited from master's level programs in three universities located in the Midwestern U.S.A. All participants were entering their first year of full time graduate study. Twenty-five students were from counseling programs and fifteen were from other graduate level programs, including accounting, computer science, history, and aviation. The second, or "other", program condition served as a control group in that skills taught or offered in a counseling program, such as self-understanding, emotional identification and regulation, and empathic concern, were not emphasized in the other programs. As an incentive for participating in and completing the study, students were given \$10.00 for their time. Of the forty participants who completed the pre-test measures, 33 completed the post-test questionnaires as well.

Demographic characteristics of the participants are presented in Table 1 (Appendix A1). The forty participants ranged in age from 22 to 48 years with a mean age of 27 years and a modal age of 22 years ($SD = 7.06$). Twenty-eight women and twelve men participated in the study and the following ethnic affiliations were reported: 35 Caucasian, 3 Native American, 1 Asian American, and 1 East Indian American participants.

Materials

Six questionnaires were used for the purposes of this investigation: a demographic questionnaire, a personality inventory, a measure of recent life events/ stressors, two measures of emotional intelligence, and a counselor supervisor ratings form. On the demographic information form, participants were asked to provide their scores from the Graduate Records Examination (GRE), the Graduate Management Admissions Test (GMAT), and/or Miller Analogy Test (MAT) scores. The GRE General test, once known as the GRE Aptitude test, is designed to measure one's aptitude for cognitive work that is typical of graduate school and is divided into three sections: Verbal, Quantitative, and Analytical (Robinson & Katzman, 1998). Thirteen of the forty participants reported their GRE scores. The Verbal GRE scores ranged from 340 to 610, with a mean of 481.5 (SD = 89.1). The Quantitative GRE scores ranged from 380 to 770, with a mean of 565 (SD = 124.8). The Analytical GRE scores ranged from 400 to 800 with a mean score of 620 (SD = 123.2).

The MAT consists of one hundred analogies that cover a variety of subjects. The test is designed to be a high-level mental abilities test and is often used as part of the selection process in applying to graduate schools (Lerner, 1997). Four participants had reported scores from the Millers Analogies Test with a range of 32 to 50, and a mean score of 43.25 (SD = 8.3).

The Graduate Management Admissions Test, or GMAT, is used as a selection tool in graduate level business, management, and accounting programs, and requires knowledge of mathematics, fundamentals of English, argument analysis, and writing (www.powerscore.com/gmat/gmat.htm, 2004). Six participants reported their GMAT,

scores. A score range was observed from 320 to 660, with a mean score of 439 (SD = 283.9).

Undergraduate Grade Point Average (GPA) was included in this study as an additional performance measure. Thirty participants provided their undergraduate G.P.A. scores that ranged from 2.3 to 3.9, with a mean of 3.44 (SD = .366). The demographic questionnaire is presented in Appendix B.

The Sixteen Personality Factor Questionnaire Fifth Edition, or 16PF, is a measure of one's personality components and domains (Cattell, Cattell, & Cattell, 1993). Previous research has supported the idea that self-report measures of *EI* are merely measures of personality traits and as such, do not add to the prediction of future performance. In this study, the 16PF functioned as a measure of one's personality. The instrument contains 185 items that make up 16 personality factors under five broad personality domains: Extraversion, Anxiety, Tough-Mindedness, Independence, and Self-Control. The examination takes between 35 to 50 minutes to complete and the level of reading difficulty is at a fifth-grade level. Using 204 university undergraduate and graduate students, the test developers' test-retest reliability for the primary factors ranged from .69 to .86, with a mean of .80. Test-retest coefficients for the global factors ranged from .84 to .91 with a mean of .87. Internal Consistency values for 2,500 adults ranged from .64 to .75, with an average of .74. Factor analysis studies consistently support the 16 primary scales and 5 global scales through correlations and inter-correlational patterns. For the current data, the internal consistency values are listed in Table 2 (Appendix A2). For pre-test measures, the coefficient alpha scores ranged from 0.44 to 0.87 and for posttest the range was between 0.49 and 0.85.

The Mayer- Salovey- Caruso Emotional Intelligence Test, or MSCEIT, is an ability-based measure of emotional intelligence that is designed to assess a person's capacity to reason with emotional-based information (Mayer, Salovey, Caruso, & Sitarenios, in press). The assessment was included in this study to measure changes in EI ability and to observe the predictive value specific to performance. O'Connor and Little (manuscript under review) state that "conceptually, it seems logical that an ability measure of EI that is based on cognitive skills such as reasoning might be a more effective predictor of academic achievement (p.3)". In the MSCEIT, tests scores are organized into four branch scores that reflect the theory posited by Mayer, Salovey, and Caruso which are: a) perceiving emotions, b) using emotions to facilitate thought, c) understanding emotions, and d) managing emotions (Mayer, Salovey, Caruso, & Sitarenios, in press). Sample items are presented in Appendix F.

Psychometric information was collected from an ethnically diverse sample of 2,112 adult respondents, 58.6% of which were women and 41.4% were men. Full test-split-half reliability was found to be .93 for this sample group. The four branch score split half reliabilities ranged from .79 for branch two (facilitation) to .91 for branch one (perception). Validation of a general EI construct and a four-branch model was conducted using structural equation modeling for confirmatory factor analysis. Results supported the theoretical model of the MSCEIT with a normed fit index (NFI) ranging from .99 to .98 across the one factor and four factor models, a Tucker-Lewis index between .98 and .96 and an RMSEA of .05 for the four-factor model. According to the authors, the results support the psychometric soundness of the MSCEIT.

The MSCEIT was included in this current study to observe the concurrent and predictive dynamics of the measures as well to determine the extent to which an abilities based measure of EI can change or be taught. As a measure of EI, this test appears promising and is conceptually congruent with the initial definition in terms of approach (abilities based) and content (with coverage paid to the different definitional aspects, namely managing, understanding, facilitating, and perceiving emotional content).

The Emotional Intelligence Scale (Schutte, Malouff, Hall, Haggerty, Cooper, Golden, & Dornheim, 1998) is a 33 item self-report measure designed to assess an individual's emotional intelligence based on the Salovey and Mayer model (1990). The Emotional Intelligence Scale, or EIS, produces one total score summed across all items on the test, with higher scores indicating greater emotional intelligence. The EIS is presented in Appendix F.

Psychometric information was collected from 346 individuals, 218 of which were women and 111 reported men. The average age was 29.27 years old. Internal reliability showed a Cronbach's alpha of 0.87 and the test-retest estimate after two weeks was 0.78. Predictive validity was described in the literature review presented earlier. Using grade point average as a criterion, the examiners reported a correlation of $r = .32, p < 0.01$. Discriminate validity was assessed using Scholastic Aptitude Tests and the NEO-PI personality measure. The examiners maintain that the measure demonstrated both discriminate, and predictive validity (Schutte et al, 2002). No studies were found examining the concurrent validity of the EIS. In the current sample, a Cronbach's alpha of 0.44 was observed for the pretest measure and 0.86 was observed for the posttest measure. Tables 3 (Appendix A3) and 4 (Appendix A4) summarizes the results.

Although the EIS was based conceptually on the Mayer and Salovey abilities model, researchers caution that self-report measures are in and of themselves measures of personality traits and, as such, do not qualify as “intelligence” (Petrides & Furnham, 2001). Moreover, personality traits are, according to some experts, extraordinarily persistent and rigid in adulthood (McCrae, 2000). Thus we expected that self-report measures may be less malleable and changing than the expectedly more malleable ability based EI measures.

Moreover, self-report measures are considered to be less than perfect measures of any given construct (Anastasi & Urbana, 1997). This would appear to be especially true with measures of abilities. Putting this into context, one would not expect to measure an examinee’s mathematical abilities by asking him or her how smart he or she thinks he or she is in solving math problems. Similarly, asking a person how skilled they are in areas of emotional intelligence will not always yield reliable data. Rather one would expect these measures to be closer conceptually to one’s emotional self-efficacy as opposed to intelligence proper. Despite these concerns, self-report measures of EI are used in research and practice and, as such, are represented in this present study.

Performance Evaluation. Performance was assessed via supervisor evaluation. A Counselor Evaluation Form was given to the students’ supervisors to complete after the participant’s first year in the program. The Site Supervisor’s Evaluation of Student Counselor’s Performance by Hackney (1973) was used as a measurement instrument. Content includes: general supervision/ professionalism, the counseling process, and the conceptualization process. The nature of the questions varies from “demonstrates a personal commitment in developing professional competencies” to “is relaxed and

comfortable in the interview”. Supervisors are asked to rate their supervisees on a scale from one to six, with the instructions to provide a one or two for performances that are in the lowest 25% of students you worked with, a 3 or 4 for the students who are in the average range of students you worked with (50% of the students) and a 5 or 6 for students who are in the top 25% percent of students that you have with. In this way, a restricted range where all students are performing well may be eliminated. In the current study, fourteen supervisor ratings forms were returned. Most of the supervisors omitted test items based on limited information or content areas they felt were not applicable to their supervisees. To control for this problem, evaluation ratings were summed for each participant and were then divided by the number of responses provided by the supervisor, producing an average item score for each participant.

This measure was initially developed as an informal survey and organizational tool for supervisors as opposed to a measure that quantifies overall supervisee’s overall performance. Thus, there is no published psychometric data on this instrument. In our current sample, a Cronbach alpha score of .97 was observed. The mean score on supervisor ratings was 3.92 (SD = .73) with a range from 2.89 to 5.74. The questionnaire is presented in Appendix G.

The Survey of Recent Life Events, or SRE (Rahe, 1972), is a measure of the cumulative life events or experiences within nine months of responding to the questionnaire. The underlying assumption is that specific events have a cumulative impact on a person’s well-being, with some having more of an effect than others. It may also be possible that a quickly accrued amount of life changing experiences may influence one's emotional intelligence, both positively and/ or negatively. A number of

negative life experiences may diminish one's emotional resiliency, thus making regulation of one's emotions or understanding the emotions of others to be difficult. Conversely, a series of life changing events may provide the individual with opportunities to regulate and understand his/her own emotional material and to cope with emotionally laden life events. In this way, life experiences outside of counseling or graduate training may be impacting one's responses to emotional intelligence surveys and as such are a necessary inclusion to this study. See Appendix H for this survey.

Again, there is little to no previous psychometric properties found for this survey. In the current study, a mean score of 179 was observed (SD = 106) with a range from 40 to 579.

Procedures

Questionnaires were given to participants in three master's level counseling programs and participants in a master's level accounting program, aviation program, computer science program, and history program, respectively, at universities across the Midwestern United States. All participants completed the MSCEIT, EIS, 16PF, and a demographics form (Appendix B) within one month of starting the first year of their program. A second battery of questionnaires was then given to students one month prior to their completing their first academic year. The second battery included the MSCEIT, the EIS, the 16PF, and the Survey of Recent Life Events questionnaire. The purpose for giving the Life Events Questionnaire post-test only was to identify life experiences that occurred outside of the graduate program during the academic year and the extent to which these stressors impacted one's responses to the EI measures. The participants' counseling supervisors were also given the supervisor evaluation form.

Two testing conditions were used: an experimental condition, consisting of participants from the counseling program, and the control condition, consisting of participants from the other graduate programs. Again, the assumption is that the training program in counseling provides education in and exposure to areas such as empathy, emotional understanding in self and others, and interpersonal effectiveness, areas that are not a part of the other programs' curricula. As such, a student in counseling would be trained in such areas as empathic understanding and, thus, his/her emotional intelligence would be expected to improve due to the training program, while the converse would be expected for a student in the control condition, whose training regiment would not include empathy or interpersonal effectiveness.

For participants entering into a counseling program, their clinical/ practicum supervisors completed the counselor evaluation forms at the end of the first academic year. In this study, the supervisor evaluations function as the performance criterion at year's end. For participants in the control condition, there were no evaluation forms completed by supervisors.

CHAPTER IV

RESULTS

In this chapter the research results from the two primary hypotheses are described, as well as additional analyses used to explore potential relationships of interest among the variables. The first hypothesis is that scores on Emotional Intelligence scales will explain a significant portion of the variance in counselor performance evaluations above and beyond what is explained by personality and cognitive ability. The second hypothesis is that counselor trainees (graduate students) will show higher levels of emotional intelligence than non-counselor trainee (graduate) students at the end of the first year of graduate school.

Preliminary Analysis

As a means of assessing for any confounding influence, several preliminary analyses were completed. Specifically, I was interested in the potential influence of environmental stress throughout the testing year on one's emotional intelligence at the end of the testing period. The Survey of Recent Life Events was used as a measure of life stressors over the study period and was compared to the emotional intelligence scales. Using correlational analyses, no significant relationships were observed between the Survey of Recent Life Events Scale (Rahe, 1972), and the Mayer-Salovey-Caruso Emotional Intelligence Test (Mayer, Salovey, Caruso, & Sitarenios, in press), ($r = -.14, p > .05$), or between the Life Events Scale and the Emotional Intelligence Scale (Schutte,

Malouff, Hall, Haggerty, Cooper, Golden, & Dornheim, 1998), ($r = -.20, p > .05$). Due to the low number of participants who completed the Millers Analogies Test and Graduate Management Admissions Test (four and six respectively), neither measure was included as a performance variable in the current study.

According to Bar-On (2000), significant gender differences have been observed in the EI literature, with women traditionally scoring higher than men on measures of EI. In this study, gender effects were examined using analysis of variance (ANOVA). Women scored significantly higher than men on the MSCEIT pre-test total scores, Branch One (perceiving emotions) scores, and Branch Four (managing emotions) scores. No significant differences were observed in pre-test EIS scores. On post-test MSCEIT scores, women scored significantly higher than men on branch one, but not on the other scales. This suggests that the gender gap that was evident during the beginning of the academic year had closed considerably. No differences were observed on the post-test EIS.

On the Sixteen Personality Factor Inventory pre-test scores, women scored significantly higher than men on anxiety scales while men scored higher than women on the B, or reasoning, scale. There were no significant changes from pre to post test measurement in either the MSCEIT or the EIS when partitioned by gender. Tables 5 (Appendix A5) and 6 (Appendix A6) summarize the results.

Due to the potential overlap that may exist between EI scores and personality measures (McCrae, 2000), 16PF Global scales were compared to both the MSCEIT and the EIS. Significant negative relationships were observed between the 16PF Tough-Mindedness Global Scales and several MSCEIT pretest scales, including MSCEIT total

scale ($r = -.38, p < .05$), Understanding Emotions ($r = -.47, p < .01$), and Managing Emotions ($r = -.42, p < .05$). Significant relationships were also observed between pre-test Extraversion scale and the MSCEIT Managing Emotions scale ($r = .37, p < .05$), as well as between the pre-test Extraversion and the EIS ($r = .37, p < .05$). Significant negative relationships were demonstrated between MSCEIT Understanding Emotions and Anxiety ($r = -.37, p < .05$). Independence was significant with MSCEIT Managing Emotions ($r = .36, p < .05$). Supervisor ratings were positively related to undergraduate grade point average and the 16PF Reasoning scale pre-test scores ($r = .57, p < .05$).

When pre-test MSCEIT scores were compared to post-test 16PF scores, significant negative relationships were demonstrated between Tough-mindedness and MSCEIT total, Perceiving Emotions, Understanding Emotions, and Managing Emotions scores. A significant negative relationship was observed between MSCEIT Managing Emotions and Extraversion ($r = .56, p < .01$). No significant relationships were observed between pre-test EIS and post-test 16PF scores.

When post-test results of the MSCEIT were compared with pre-test 16PF scores, MSCEIT total, Facilitating Thought, and Managing Emotions were negatively related to Tough-mindedness. Understanding Emotions was positively related to GRE Verbal ($r = .66, p < .05$) and Undergraduate Grade Point Average ($r = .47, p < .05$), and MSCEIT total score was related to GRE Verbal ($r = .69, p < .05$).

Post-test scores for the MSCEIT were compared to post-test scores for the 16PF scales. MSCEIT total and Managing Emotions scores were negatively related to Tough-mindedness. Understanding Emotions and EIS total scores were negatively related to Anxiety and EIS Managing Emotions was positively related to Extraversion. The results

are summarized in correlational matrices presented in Tables 7 (Appendix A7) and 8 (Appendix A8).

Hypothesis 1

To reiterate, the first hypothesis is that both EI ability and self-report measures would explain a significant portion of the error variance in counselor performance evaluations above and beyond what is explained by personality and cognitive ability. In order to examine the unique contribution of emotional intelligence on later performance, a stepwise linear regression analysis was used. The five global scales from the 16PF (Extraversion, Anxiety, Tough-Mindedness, Independence, Self-Control) were used as personality indices, the MSCEIT and EIS were used respectively as ability and self report measures of emotional intelligence, undergraduate GPA was used as an ability/achievement measure, and the 16PF Reasoning Factor, or B, was used as an additional measure of cognitive ability. GRE, MAT, and GMAT scores were not used in this analysis due to the low number of participants who reported their scores. A stepwise procedure was used to select variables for the equation (probability of F to enter $\leq .050$ and a probability of F to remove $\geq .100$).

Among the predictor variables, GPA was found to be a statistically significant predictor of counselor performance and thus was entered into the final equation, $F(1, 13) = 8.552, p = .013$. The remaining variables were not statistically significant predictors of counselor performance and thus were excluded from the final equation. The regression procedure was repeated using GPA and post-test measures (16PF Global Scales, 16PF Reasoning Factor Scale, MSCEIT, and EIS measures). Again, only GPA contributed

significantly to the overall equation, $F(1, 9) = 6.98, p = .03$. The means and standard deviations for the predictor variables are presented in Table 10 (Appendix A10).

Planned Comparisons

Although this writer did not observe a unique contribution made by either emotional intelligence measure to counselor performance ratings, correlational analyses were performed to address individual relationships among the pretest variables. When the relationship between counselor performance ratings and the other variables was assessed, only undergraduate grade point average demonstrated a significant relationship, $r(15) = .65, p < .01$. Regression analysis demonstrated small effect sizes when MSCEIT was entered as a predictor of supervisor ratings, $R^2 \text{ Change} = .033$, and when EIS was entered as a predictor of supervisor ratings, $R^2 \text{ Change} = .003$. These smaller effect sizes support the idea that the lack of significance in the results is not entirely due to a low participant sample size. When MSCEIT scores were compared to scores on the EIS, no significant relationship was observed, $r(34) = .068, p = .70$ (the probability of Type I error was maintained at an alpha level of 0.05 for the planned comparison components in this study). Similarly, no relationships were observed between the EIS scale and the four MSCEIT branch scores. This information is presented in the correlational matrices in Tables 7 (Appendix A7) and 8 (Appendix A8).

Based on the above results, my first hypothesis was not confirmed in this study. A more thorough discussion will be provided in Chapter 5 of this text.

Hypothesis 2

The second hypothesis is that emotional intelligence will improve after the first year of training in a master's level counseling program. ANCOVA designs were

employed for each EI assessment. In each analysis, the independent variable was defined as the condition (counseling program vs. the "other" program condition), the dependent variables were defined as the post-test measures of the MSCEIT, EIS, and 16PF Global Factors. The pretest measure of each scale was included as a covariate. ANCOVA analyses were selected over MANCOVA'S given the lack of relationship shown between the dependent variables (including the EIS and the MSCEIT).

When the MSCEIT post-test measure was used as a dependent measure and the MSCEIT pre-test measure was used as a covariate, no statistical significance was observed based on the participant's graduate program or condition, $F(1, 23) = .112, p = .74$. An effect size of .005 was observed. The EIS questionnaire was also analyzed using the post-test measure as a dependent measure and pretest measure as a covariate. There was no statistical significance observed when the program condition was included, $F(1, 23) = .957, p = .338$. An effect size of .008 was calculated. Among the 16PF Global Scales, no significant effects were observed with participant condition (at or below a probability of .05). In terms of cognitive measurement, no significant effects were observed between the 16PF B (Reasoning) Scale post test measure and the program condition when the 16PF B pretest measure was used as a covariate, $F(1, 21) = 3.939, p = .06$. Table 10 (Appendix A10) summarizes the results.

Planned Comparisons

Emotional intelligence change was further assessed through pretest and posttest mean comparisons in the entire sample and then in each program condition. Using a paired sample t-test, participant scores on the MSCEIT in both the counseling and other program conditions were compared at pretest and posttest. The MSCEIT pre-test mean

score (92.81) was not significantly different from the MSCEIT post-test mean score (94.96), $t(25) = -.899, p = .377$. Among the four MSCEIT branch scores, significant change in scores was observed in branch three, Understanding Emotions, for which the pretest mean (95.15) was significantly smaller than the posttest mean (99.31), $t(25) = -2.188, p = .038$. There were no significant differences in the other three scores. For the self-report EIS scale, a significant decrease was observed from pretest (133.08) to posttest (126.23) measurements, $t(25) = .013, p = .013$.

Changes in emotional intelligence scores were then examined with participants in the counseling program condition. No significant differences were observed between pre and posttest situations in the MSCEIT total score, the four MSCEIT branch scores, or the self-report EIS measure, based on an alpha level of .05. Similarly, no changes were observed between pre and posttest measures of emotional intelligence in the control, or other program condition. These results are summarized in Tables 11 (Appendix A11), 12 (Appendix A12), and 13 (Appendix A13).

The results of this study did not support hypothesis 2. A discussion of these findings will follow in Chapter 5 of this text.

Personality change during the academic year was examined using a paired sample t-test strategy and using the global factors of the 16PF. When participants were examined in all conditions, significant changes were observed in two of the five scales. The scores for Extraversion dropped significantly from pretest (6.48) to posttest (5.86) observations, $t(24) = 2.323, p = .029$. Also, mean scores on the tough-mindedness scale increased over the academic year, from 4.59 pretest to 5.11 posttest, $t(24) = -2.09, p = .048$. None of the

remaining three global scales (Anxiety, Self-Control, and Independence) demonstrated significant changes throughout the year.

No changes in personality characteristics were observed among participants in counseling programs. In the control group, mean changes were noted in the Extraversion Global Scale which had dropped from 6.58 at the beginning of the year to 5.25 at the end of the academic year, $t(7) = 2.832, p = .025$.

The 16PF B, or Reasoning, scale was used to assess cognitive ability. When all of the participants were included in the analysis, a significant increase was observed from pretest (6.5) to posttest measurement (7.33), $t(23) = -3.122, p = .005$. Differences in the reasoning scale were then assessed with the counseling group alone. The results indicated that there was no significant difference between pretest and posttest measurements at or below an alpha level of .05 with participants in the counseling program condition. When the control condition was assessed separately from the counseling condition, the reasoning scale mean score increased significantly from 7.13 during pretest to 8.38 at post-test measurement, $t(7) = -2.76, p = .028$. Tables 14 (Appendix A14), 15 (Appendix A15), and 16 (Appendix A16) summarize the results.

CHAPTER V

DISCUSSION

The purpose of this study was essentially to examine emotional intelligence within the context of a first-year counseling program and to observe qualities and characteristics of this construct. Specifically, I wanted to explain the relationship between emotional intelligence and success and whether or not one's emotional intelligence would predict future successes. In the context of a master's level counseling program, supervisor ratings were used as a general measure of performance. The limitations to this approach will be discussed later in this chapter.

Given the popularity of emotional intelligence training workshops and the conceptualization of EI as an ability, I was also interested in observing emotional intelligence change or growth. Again, the first year master's level counseling program provided me with a context whereby I could track students as they worked throughout the year. With focal areas on empathy, self-understanding, and dealing with emotional material of others in their course and practicum experiences, the students are exposed to training that mirrors the initial conceptualization of EI as presented by Salovey and Mayer. Given this exposure, I hypothesized that students' emotional intelligence would change and increase during their first year, over and above that of graduate students in non-helping professions, due to their participation in a graduate-level counselor training program.

Finally, the relationships among the variables were also used as an examination of the construct validity of EI. This was essentially to determine the extent to which EI was a unique construct as opposed to already identified construct such as personality variables. Recall the argument made earlier in Chapter Two, that emotional intelligence may essentially be little more than a personality characteristic (McCrae, 2000). Another reason for examining the relationships among the variables was to see the extent to which the two methods of EI measurement agreed with one another. The question is whether or not the abilities EI measure and the self-report EI measure explain the same or similar variance in participant ratings, and thus, whether or not both measures are explaining the same construct.

In this chapter, I discuss the results of this study as they pertain to the two research questions posed earlier. I also discuss the implications of this research for the field of EI study and practice. Finally, the limitations of my research are reviewed, as well as avenues for future study.

Summary of Results

Preliminary Analysis. Preliminary analyses were conducted to determine the impact of variables such as gender and age of participants, and to see if pre-test differences existed on dependent measures based on type of graduate program (counseling vs. non-counseling). As expected, gender differences were observed on the MSCEIT emotional intelligence measure, with women scoring higher than men in both conditions. This supports earlier reports that, despite the training environment, women seem to score higher on EI tests than men (BarOn, 1997).

There was no observed relationship between age and EI in this population. This is contrary to the research suggesting increases in EI throughout the life span. In our population there was a restricted range and the vast majority of the participants were in their 20's. Perhaps with a more representative participant sample, we would see the expected age differences in EI.

Relationships were observed between the MSCEIT and the 16PF scores. The MSCEIT total and branch scores were significantly and negatively related to the Tough-Mindedness Global scale. According to Russell and Karol (1994), low scores on Tough-mindedness reflect intuition, receptivity, and open-mindedness while high scores represent insensitivity and lack of empathy. Thus, the converse relationship between the MSCEIT and Tough-mindedness scales appears logical and expected.

The 16PF Anxiety Global scale was significantly and negatively related to the MSCEIT Understanding Emotions scale. This finding suggests that individuals who are highly anxious may have barriers toward understanding emotional material, perhaps due to preoccupation with their own anxious thoughts.

The 16PF Extraversion scale was positively related to the MSCEIT Managing Emotions scale. Russell and Karol (1994) described high extraverts as being socially participating and involved. This is certainly similar to the idea of managing one's emotions which Mayer and colleagues (2002) describe as being open to and modulating the feelings in others as well as the self. The relationships between the 16PF scales and the MSCEIT were demonstrated at pre and posttest measurement. Overall, the relationships in this study were consistent with the findings by Mayer, Salovey, and Caruso (2002). The researchers observed that the MSCEIT total score correlated

positively with Extraversion ($r = .16, p < .05$), and negatively with Tough-mindedness ($r = -.19, p < .05$). Overall, these relationships reflect, and are consistent with the emotional intelligence construct and previous research.

The Emotional Intelligence Scale was positively related to Extraversion during pretest measurement, and was negatively related to Anxiety during post-test measurement. No relationship was observed between EIS and Tough-mindedness. These correlations suggest that EIS may be a stronger measure of confidence and perceived social efficacy than a measure of emotional intelligence.

Hypothesis 1. Hypothesis 1 stated that emotional intelligence would explain a significant portion of the error variance in counselor performance evaluations above and beyond what is explained by personality and cognitive ability. This hypothesis was not supported by the results. A stepwise regression procedure was used where pretest measures were used as predictor variables (self-report and ability EI measures, 16PF global factors, the 16PF B or Reasoning scale, and the standardized performance tests) and supervisor ratings were used as a criterion measure of success/ performance. None of the predictor variables were significant and were not entered into the final regression equation. Correlations between the predictor variables and the criterion were also compared. Again, no significant relationships were observed between emotional intelligence ratings and performance ratings. Also, no significant relationships were observed between the 16PF scales and performance ratings. Surprisingly, a relationship was observed between the pre-test intellectual based measure (16PF Reasoning scale) and supervisor ratings, suggesting that cognitive ability may indeed be important in determining future performance.

The analyses were duplicated using the post-test measures of EI, 16PF, and intellectual performance measures as predictor variables and supervisor ratings as the criterion. Again, no significant relationships were observed between the predictor variables and the criterion.

Interestingly, when undergraduate grade point average was entered into the stepwise regression analysis, it was significant enough to be included in the final equation when supervisor rating was used as a criterion variable. A correlational analysis was also performed and undergraduate GPA correlated significantly with supervisor ratings.

Discussion. The relationship, or lack of relationship, between emotional intelligence measures and supervisor ratings was surprising. If we can accept that supervisor ratings are an adequate and appropriate measure of performance or “success” as it pertains to a first year master’s level program, then the expected relationship between emotional intelligence and success, particularly work performance, may need to be further evaluated. Goleman described this relationship in his best selling book and others have echoed his idea (Fox & Spector, 2000; Goleman, 1995; Hatzes, 1996). However, in the present study, this relationship was not observed in either the self-report or the abilities based measure. One explanation may be that of measurement error. The performance ratings from supervisors are highly subjective and the EI measures used may not represent “true” measures of EI. We will discuss the impact of measurement error further when we discuss the limitations of this current study.

Another explanation may require taking the results at face value, in that emotional intelligence may not be related to counselor performance. In other words, the ability to understand the affect of self and others, to facilitate emotional content, and to manage

that content may not be as important as other variables in determining performance success at least in terms of supervisor ratings. Undergraduate GPA was significantly related to performance ratings – thus, strong work ethic, motivation, and solid knowledge base may be a particularly important determinant in performance, especially when performance criterion is supervisor ratings.

In this study, I did not determine the extent to which supervisors had access to, or had prior knowledge of, the student's undergraduate grade point average before evaluation. It is possible then that this relationship existed due to a "priming" effect, where GPA influenced the way in which the supervisor rated the student. However, this initial exposure was not controlled for and may have affected responses on the ratings forms.

Hypothesis 2. Hypothesis 2 stated that emotional intelligence would improve, above and beyond that of non-counseling graduate students, after the first year of training in a master's level counseling program. When I compared EI scores at the beginning and end of the school year, no changes were observed with either the abilities based test or the self-report questionnaire. This finding was consistent in both the counseling and the control conditions. Using an analysis of covariance, or ANCOVA procedure, the MSCEIT and EIS post-test measures were independently employed as dependent measures, the condition (counseling and control) was used as an independent measure, and the MSCEIT and EIS pre-test measures were used as the covariates. No significant differences were observed when counseling students were compared to the other students. This suggests that, contrary to my hypothesis, counseling students did not demonstrate greater EI growth than students in other programs.

As a follow-up, I looked at EI change specifically within each condition using a paired sample t-test to compare pretest and posttest measures of each instrument. In the counseling condition, no significant differences were observed between pre and posttest situations in the MSCEIT or the self-report EIS measure, based on an alpha level of .05. Similarly, no changes were observed between pre and posttest measures of emotional intelligence in the control condition. Surprisingly, when EI scores were observed in participants from both conditions, significant mean difference was demonstrated in branch three of the MSCEIT, Understanding Emotions, with a pretest mean of 95.15 and a posttest mean of 99.31, $t(25) = -2.188, p = .038$. Significant decreases were observed in the self-report EIS score when all participants were compared from a pretest mean of 133.08 to a post-test mean of 126.23.

Discussion. According to Hypothesis 2, we would expect to see greater increases of emotional intelligence in the counseling students than we would in the control condition. However, we did not see increases in either condition, suggesting that Emotional Intelligence, as measured by the MSCEIT and the EIS, is not malleable or trainable, at least within the context of a year-long counseling program. One potential reason for this could be that the counseling programs' training experiences were not sufficient in improving EI ability. In this study, I did not create a training environment specifically for EI improvement, but rather used training facilities that focused on counselor skill development. Because of the theoretical overlap between counselor development and emotional intelligence, I hypothesized that the counselor-training environment would be appropriate. Emotional Intelligence training programs are advertising that a demonstrated improvement does indeed occur with EI. With a lack of

available research to support this claim, the benefit of EI training programs is, at this stage, speculative. However, the more theoretically specific conditions of an EI training program may prove beneficial in improving one's emotional intelligence.

A second explanation may be that emotional intelligence is not a malleable construct. Perhaps we did not see changes in emotional intelligence because emotional intelligence is not teachable. Without data to demonstrate EI change following an intervention, we do not have sufficient evidence to conclude that EI can be changed. A number of studies have demonstrated EI change in individuals as they age. Then perhaps change, as observed in older versus younger individuals, occurs as a result of maturation as opposed to training. If we accept the possibility that EI is an enduring personal characteristic, then we may also need to accept the possibility, posited by McCrae (2000), that emotional intelligence may be best conceptualized as a personality characteristic as opposed to a trainable ability.

Another possibility for the lack of change in EI scores is that the MSCEIT and EIS may simply be faulty measures of emotional intelligence. When we compared both EI measures we found no significant relationships between the two scales either pretest or post test. Given the apparent problem with convergent validity in these measures, it is possible that one or both tests do not adequately measure the emotional intelligence construct. For example, a few of the questions from the MSCEIT are presented as long passages and would require a certain level of reading ability. When asking questions related to understanding and managing emotions, the test taker is asked to choose the best response or fill in the blank. In this respect, one's level of reading comprehension will certainly interfere with the test responses and, as a result, these EI questions may be little

more than tests of passage comprehension. Not to mention the passages do not necessarily invoke emotion. There is a difference between cognitively understanding the “right” way to handle an emotional situation that has been described on paper, and being in the midst of the emotional situation and having the wherewithal to handle it the “right” way.

Moreover, an argument may be made for the self-report questionnaire as being closer akin to a test of emotional self-efficacy versus emotional intelligence per se. In the present study, increases were observed from pre to post test scores of the Emotional Intelligence Scale (when both conditions were combined in the analysis). This suggests that, as a population, first year graduate students improved in terms of how they rated themselves and as such, may have become more confident in their emotional behavior and competencies, despite their abilities or the graduate program they participated in.

Implications

Is EI trainable? One important consideration in the test results involves the teaching and training of EI. With the number of programs dedicated to EI development or social skills training, one would assume that it is possible to learn. Again, this was not demonstrated in our current study. If we accept this finding as valid and that the effectiveness of EI training (as represented by counselor training programs) had not been demonstrated in one academic year, then we may question the effectiveness of EI training that is offered as weekend or week-long workshops. More research is needed to look at “specific factors” related to emotional intelligence growth and change.

In terms of counselor training programs, if increases in emotional competencies were not observed, perhaps training programs may need to reevaluate how counselor

skills are being taught, that is if the goal is to increase one's EI. For example, specific training in understanding and managing specific emotions in self and others may be one way to meet this goal. On a theoretical note, if we take the position that EI is related to counselor skills, then perhaps counselor skills are not as malleable as some professionals may believe (Hackney & Cormier, 1996). That is, good counselors may be born and not made. Of course, this statement would contradict the opinions of many supervisors and trainers that observe changes in students throughout their training. The question of whether or not students can be trained to become effective counselors is beyond the scope of this paper and further research and discussion will need to continue on this important topic.

Because there was no relationship between EI and supervisor ratings, one may question whether or not it is important to focus on emotional competencies at all when working with clients. Perhaps there truly is no strong connection between emotional sensitivity and counseling effectiveness. This is, of course, an unromantic and counter-intuitive proposition in that one would expect emotional skill to be an important component of any therapeutic relationship (Hackney & Cormier, 1996). As the results from this study suggested, GPA was positively related to success. It is possible that, at least in the earlier stages of a counselor's career, work ethic and persistence may be more important determinants in predicting a successful counselor-in-training than emotional intelligence.

Does EI predict success? Goleman (1995) stated that EI skills would predict success in the work environment. However, this idea was not demonstrated in the current study and other variables, particularly, undergraduate GPA, were stronger predictors of

performance than were the two EI measures. It is possible that the “promise” of EI as a predictor of success may be premature, particularly when used so globally, as different work environments require different skills and expectations (Dawis, 1996). Perhaps, then, other characteristics, such as work ethic, achievement drive, and motivation may be the most powerful predictors of success, at least in a graduate school counseling program.

Is EI a valid construct? Despite the energy placed in EI measurement, we have observed that the two scales in this study were not related, thus, throwing the convergent validity of the construct into question. This was indeed a surprising finding, given that both the MSCEIT and the EIS were derived from the same definitional source (Salovey & Mayer, 1990). Thus, one will expect at least some overlap between the measures. This observed lack of relationship between the two measures suggests that abilities measures and self-report measures actually measure different constructs. In terms of dynamics, the MSCEIT and EIS behaved in different ways as well, with no differences observed in MSCEIT changes and decreases observed in EIS scores throughout the academic year.

By recognizing the differences between the measures, it becomes particularly clear that attempting cross study comparisons is essentially an exercise in futility. The inconsistent findings and difficulties with understanding the EI construct were discussed earlier (O'Connor, & Little, manuscript under review; Schutte, Malouffe, Hall, Haggerty, Cooper, Golden, & Dornheim, 1998) and is likely a result of these measurement problems. More consistent methods need to be employed and more discussion needs to be given to the nature of abilities and self-report tests (i.e. what are their unique attributes and how are they different from one another?). The task, then, will be to understand these measures as measuring distinct and essentially unrelated constructs versus combining

them and using them interchangeably as a measure of the EI construct. More research must be done to look at EI measurement, and, in particular, the “appropriateness” of using one measure over another.

Limitations

There are a number of limitations of this study including the difficulty with using counselor ratings as performance criteria, the lower number of participants and unequal conditions, the potentially difficulty with using separate counseling training programs, and measurement issues. Each of these limitations are discussed in this section. As stated earlier, there are potential difficulties with using counselor ratings as performance criteria. First all, it is a subjective measure and, as such, is prone to biases on the part of the evaluator. Second, the notion of quantifying “success” must be handled cautiously. The supervisor ratings scale is essentially a survey and no psychometrics have been published on it. It’s usefulness as a quantifiable measure of performance has not been demonstrated elsewhere in the literature.

A further point about the Supervisor Ratings Scale is worth noting. The scoring procedure in this study involved collapsing all the items into one final score. It is possible that a few items in the scale are more specifically related to emotional intelligence or emotionally based intervention. That relationship may be lost when the scores are collapsed. Further studies will be needed to look at the individual items to determine their relationship to EI. Factor analysis may be useful in this regard.

Moreover, the idea that counselor performance can be adequately measured by an outside observer may be a tenuous notion. Other gages may be equally or more effective in determining therapeutic effectiveness, such as the experience of the clients themselves.

By not being in the session (i.e. a part of the relationship), the supervisor may be missing out on an important yet potentially intangible dynamic. Given that the supervised sessions were essentially role-play, this makes the experience even farther from an authentic therapy experience. It is possible that EI would be a more important quality in an authentic counseling experience using a more personal measure of performance, such as the client's experience. Success in a counseling program is certainly multi-faceted and may be best captured by a battery of measures as opposed to a single measure. Multiple modes of evaluation may be particularly advantageous in that one may get a multitude of perspectives, such as annual faculty reviews, client impressions, supervisor ratings, and so on.

The low number of participants may threaten the power of the analysis (Cohen 1998). Moreover, the conditions were not equal and as such, the analyses may be compromised. Recall that twenty-five participants were from counseling programs while fifteen participants were from other programs. Also, there was missing data. Seventeen out of twenty-five supervisor forms were returned and thirty-three out of forty participants returned post-test questionnaires. Collectively, this may compromise the power of the test results. However, as we had seen, the effect sizes in this study were quite small, suggesting that the lack of significance found in this study was not due entirely to the low number of participants.

A further limitation is that the participants came from three separate counselor training programs. Twelve students were from one program, nine were from a second, and four were from a third program. Although the programs' missions and visions were similar in that listening skills, empathy, and emotional connection with the client were

encouraged, one can not dismiss the individual differences of each program in terms of training approach and environment.

Future Studies

There are a number of future research directions that may be posited based on the results of this study. The conditions for emotional intelligence change are still not clear. Again, an intervention that focuses specific and intentionally on the EI components will be helpful. Moreover, the students used in this study were involved in a year-long program. Perhaps a program that uses a different time schedule, such as more immersive experiences (versus the weekly classroom and lab components in the counseling programs in this study) may prove more beneficial in improving EI ability. Also, tracking changes in individuals as they continue throughout their second year in the program and perhaps into their careers may also demonstrate EI growth and or provide a further test of the EI construct.

Another potential research path includes further evaluating the relationship between emotional intelligence and success. Specifically, occupational performance expectations and successes differ based on the occupation itself (Sharf, 1997). It is possible that emotional intelligence may be more important in some career paths than in others. For example, Holland (1997) described some career paths as involving social qualities, such as social workers, counselors, teachers, etc, while other careers are less concerned about social interaction, such as trades-persons. In these less socially focused jobs, it would appear that emotional intelligence may not be as important in performance as the other socially focused jobs. Also, future research may target successes in other areas, such as interpersonal relationships. Schutte and colleagues (2001) observed a

positive relationship between reported contentment with one's spouse or partner and the emotional intelligence score of their partner.

Conclusion

Overall, the results did not support the hypotheses presented in this study. No relationships were found among emotional intelligence scores and performance ratings, and there was no demonstration of EI improvement for counselor-trainees after a year of graduate school. Also, emotional intelligence scores on the self-report EIS, and the abilities based MSCEIT, were unrelated to one another, suggesting that the two scales are measuring different constructs. Thus, we are left with the question of whether this construct holds together. The two scales in this study were not related, yet were derived from the same definitional source, and there was prediction of success. The construct of EI does not behave the way it expected to behave and its usefulness appears to be suspect. EI does not appear to explain anything new in this study. However, given the limitations of this study, these pronouncements need to be accepted with caution. Nonetheless, it appears that, despite the industry spawned by EI and its connection to success in the workplace, there still exists a paucity of research on the construct, and, in particular, a paucity of literature that supports the construct of EI as a predictor of success and as a malleable skill.

APPENDICES

**APPENDIX A1
TABLE 1**

Table 1. Demographic Characteristics of Participants.

	Frequency	Percent
Condition		
Counseling	25	62.5
Other	15	37.5
Gender		
Men	12	30
Women	28	70
Gender – Counseling		
Men	3	12
Women	22	88
Gender – Control		
Men	9	60
Women	6	40
Ethnicity		
Native American	3	7.5
Asian American	1	2.5
Caucasian	35	87.5
East Indian American	1	2.5

APPENDIX A2
TABLE 2

Table 2. Descriptive Statistics on GPA, GRE, MAT, and GMAT Scores.

	Mean	SD	Range (Minimum-Maximum)	N
Age	27.2	7.06	22 - 48	40
Undergraduate GPA	3.44	.37	2.30 - 3.99	30
GRE				
Verbal	481.5	89.1	340 – 610	13
Quantitative	565.4	124.8	380 – 770	13
Analytical	620.	123.2	400 – 800	13
Millers Analogies	43.25	8.3	32 – 50	4
GMAT	439	283.9	320 – 660	6

APPENDIX A3
TABLE 3

Table 3. Coefficient Alpha Scores for the Sixteen Personality Factor Inventory and Emotional Intelligence Scale Scores Pre and Post Test Measures.

	Pre-test	Post-test
16PF		
A	0.73	0.81
B	0.61	0.58
C	0.69	0.77
E	0.57	0.49
F	0.44	0.59
G	0.65	0.76
H	0.87	0.85
I	0.75	0.68
L	0.64	0.63
M	0.69	0.72
N	0.79	0.81
O	0.74	0.73
Q1	0.65	0.74
Q2	0.79	0.70

Note. 16PF = Sixteen Personality Factor Inventory, A = Warmth, B = Reasoning, C = Emotional Stability, E = Dominance, F = Liveliness, G = Rule Consciousness, H = Social Boldness, I = Sensitivity, L = Vigilance, M = Abstractedness, N = Privatness, O = Apprehension, Q1 = Openness to Change, Q2 = Self-Reliance.

APPENDIX A4
TABLE 4

Table 4. Coefficient Alpha Scores for the Sixteen Personality Factor Inventory and Emotional Intelligence Scale Scores Pre and Post Test Measures.

	Pre-test	Post-test
16PF		
Q3	0.70	0.68
Q4	0.81	0.83
IM	0.48	0.62
EIS	0.44	0.86

Note. 16PF = Sixteen Personality Factor Inventory, Q3 = Perfectionism, Q4 = Tension, IM = Impression Management, EIS = Emotional Intelligence Scale

APPENDIX A5
TABLE 5

Table 5. Predictor Variables – Pre-test Means, Standard Deviations, and Gender Differences.

Measure	Mean	S D	F	Sig.
Pre-test				
MSCEIT	95.56	8.58		
Women	95.67	8.54	5.01	.032
Men	86.38	9.55		
B1	99.12	10.38		
Women	100.06	10.19	9.49	.004
Men	85.63	12.43		
B4	95.84	5.9		
Women	95.44	5.79	6.49	.016
Men	89.13	7.28		
16PF Anx	5.29	1.95		
Women	4.45	1.47	11.32	.002
Men	3.65	1.88		

Note. GPA = Undergraduate Grade Point Average; MSCEIT = Mayer – Salovey – Caruso Emotional Intelligence Test; B1 = Branch 1 – Perceiving Emotions; B2 = Branch 2 – Facilitating Thought; B3 = Branch 3 – Understanding Emotions, B4 = Branch 4 – Managing Emotions; EIS = Emotional Intelligence Scale, 16PF Anx = Sixteen Personality Factor Inventory Anxiety. Women N = 18, Men N = 8.

APPENDIX A6
TABLE 6

Table 6. Predictor Variables Post-test – Means, Standard Deviations, and Gender Differences.

Measure		Mean	SD	F	Sig.
MSCEIT B1		98.5	14.0005	8.15	.008
	Women	100.61	13.22		
	Men	86.63	11.69		
16PF Anx		4.49	1.79	6.07	.02
	Women	6.126	2.001		
	Men	3.39	1.48		

Note. MSCEIT = Mayer – Salovey – Caruso Emotional Intelligence Test; B1 = Branch 1 – Perceiving Emotions; 16PF Anx = Sixteen Personality Factor Inventory Anxiety.

APPENDIX A7

TABLE 7

Table 7. Correlation Matrix for Pre-test Results of the 16PF Global Scales and B Scale, with (a) GPA, (b) GRE Verbal Measure, (c) Pre-test MSCEIT Scales, (d) Pre-test EI Scale, (e) Supervisor Ratings and (f) Life Stress Survey.

	16B	16EX	16AX	16TM	16IND	16COM
GPA	.26	-.01	.03	-.13	.20	-.21
GREV	.14	.14	.15	-.30	.15	.07
MSC	-.03	.10	.00	-.38*	.18	-.19
MSPE	-.12	.14	.03	-.14	.18	-.19
MSFT	-.14	-.15	.11	-.25	-.02	-.17
MSUE	.17	-.05	-.37*	-.47**	.19	-.18
MSME	-.14	.37*	.12	-.42*	.36*	-.19
EIS	.04	.37*	-.11	-.28	.22	.06
SUP	.57*	-.08	-.16	-.24	.48	-.30
LSS	-.28	-.05	-.08	-.27	.20	-.34

Note. GPA = Grade Point Average, GREV = Graduate Records Examination Verbal, MSCEIT = Mayer Salovey Caruso Emotional Intelligence Test, MSPE = MSCEIT Branch One - Perceived Emotions, MSFT = MSCEIT Branch Two - Facilitating Thought, MSUE = MSCEIT Branch Three - Understanding Emotions, MSME = MSCEIT Branch Four - Managing Emotions, EIS = Emotional Intelligence Scale, SUP = Supervisor Ratings, LSS = Life Stress overall N = 40, and the supervisor ratings N = 17 (only counseling students completed this questionnaire).

* $p < .05$, ** $p < .01$

APPENDIX A8
TABLE 8

Table 8. Correlation Matrix for Pre-test Results of the MSCEIT Total Score and Scales, and the EIS, with (a) GPA, (b) GRE Verbal Measure, (c) Pre-test 16PF Global and B Scales, (d) Supervisor Ratings, and (e) Life Stress Survey.

	MSCEIT	MSPE	MSFT	MSUE	MSME	EIS
GPA	-.03	.04	-.08	.09	-.09	-.01
GREV	.44	.38	.02	.70*	.25	.16
16B	-.03	-.12	-.14	.17	.03	.04
16EX	.10	.14	-.15	-.05	.37*	.37*
16AX	.00	.03	.11	-.37*	.12	-.11
16TM	-.38*	-.14	-.25	-.47**	-.419*	-.284
16IND	.18	.14	-.02	.19	.36*	.22
16COM	-.19	-.12	-.17	-.18	-.19	.06
SUP	-.18	-.18	-.15	.28	-.34	-.06
LSS	.13	.13	.25	-.19	.27	-.07

Note. GPA = Grade Point Average, GREV = Graduate Records Examination Verbal, 16 = Sixteen Personality Factor Inventory; 16Ex = Extraversion; 16Anx = Anxiety; 16TM = Tough-Mindedness; 16 Ind = Independence; 16CON = Self Control; B = Reasoning, .SUP = Supervisor Ratings, LSS = Life Stress Survey Overall N = 40 and the supervisor ratings N = 17 (only counseling students completed this questionnaire).

p < .05, ** p < .01

APPENDIX A9
TABLE 9

Table 9. Correlation Matrix for Post-test results of the MSCEIT Scales and the EIS with (a) GPA, (b) GRE Verbal measure, (c) Post-test 16PF Global and B Scales, (d) Supervisor Ratings, and (e) Life Stress Survey

	MSCEIT	MSPE	MSFT	MSUE	MSME	EIS
GPA	.31	.23	.09	.47*	.20	-.31
GREV	.69*	.49	.18	.66*	.58	.30
16B	-.32	-.25	-.26	-.01	-.24	.13
16EX	.26	.21	.12	.29	.40*	.22
16AX	-.11	.06	-.11	-.36*	-.22	-.48*
16TM	-.41*	-.32	-.36	-.36	-.48*	-.33
16IND	.02	-.16	.06	.14	.24	.24
16COM	-.02	-.19	.17	-.17	-.00	.03
SUP	-.13	-.20	-.15	.30	-.05	.02
LSS	-.14	.03	-.05	-.27	-.12	-.20

Note. GPA = Grade Point Average, GREV = Graduate Records Examination Verbal, 16 = Sixteen Personality Factor Inventory; 16Ex = Extraversion; 16Anx = Anxiety; 16TM = Tough-Mindedness; 16 Ind = Independence; 16CON = Self Control; B = Reasoning, .SUP = Supervisor Ratings, LSS = Life Stress Survey Overall N = 40 and the supervisor ratings N = 17 (only counseling students completed this questionnaire).

* $p < .05$, ** $p < .01$

APPENDIX A10
TABLE 10

Table 10. Analysis of Covariance, with Pre-test Measures as Covariates and Condition (Counseling and Control) as Dependant Variables.

	Pre-Mean	(SD)	Post-mean	(SD)	F	Sig.
MSCEIT	94.97	(10.06)	94.87	(12.54)	.112	.741
EIS	132.9	(13.32)	125.2	(11.06)	.957	.338
16PFB	6.59	(1.67)	7.28	(1.71)	3.939	.059
16PFEX	6.69	(1.42)	5.72	(1.93)	3.496	.076
16PFAN	4.18	(1.82)	4.63	(1.76)	3.72	.066
16PFTM	3.05	(1.69)	3.8	(2.19)	.206	.655
16PFIN	3.71	(1.07)	6.10	(1.76)	.259	.616
16PFSC	5.20	(1.34)	4.88	(1.68)	.002	.969

Note. MSCEIT = Mayer-Salovey Caruso Emotional Intelligence Test, EIS = Emotional Intelligence Scale, 16PFB = Sixteen Personality Factor Inventory B (Reasoning) Scale, 16EX = Sixteen Personality Factor Inventory Extraversion Scale, 16PFAN = Sixteen Personality Factor Inventory Anxiety Scale, 16PFIN = Sixteen Personality Factor Inventory Independence Scale, 16PFSC = Sixteen Personality Factor Inventory Self Control Scale.

APPENDIX A11
TABLE 11

Table 11. Paired Samples T-tests for all Participants (Counseling and Control Conditions).

	Mean	SD	t-stat	sig.
MSC1	92.81	9.71	-.899	.377
MSC2	94.96	13.51		
MSCPE1	95.62	12.65	-.37	.713
MSCPE2	96.31	14.16		
MSCFE1	95.19	9.83	-.73	.47
MSCFE2	97.27	13.15		
MSCUE1	95.15	8.77	-2.188	.038
MSCUE2	99.31	10.20		
MSCME1	93.50	6.82	.635	.53
MSCME2	92.23	11.08		
EIS1	133.08	15.04	2.68	.013
EIS2	126.23	11.50		

Note. MSC1 = Mayer-Salovey-Caruso Emotional Intelligence Test Pre-test, MSC2 = Mayer-Salovey-Caruso Emotional Intelligence Test Post-test, MSCPE1 = Perceiving Emotions Pretest MSCPE2 = Perceiving Emotions Posttest, MSCFE1 = Facilitating Emotions Pretest MSCFE2 = Facilitating Emotions Posttest MSCUE1 Understanding Emotions Pretest MSCUE2 = Understanding Emotions Posttest MSCME1 = Managing Emotions Pretest MSCME2 = Managing Emotions Posttest EIS1 = Emotional Intelligence Scale Pretest EIS2 = Emotional Intelligence Scale Posttest

APPENDIX A12
TABLE 12

Table 12. Paired Samples T-tests for Counseling Conditions.

	Mean	SD	t-stat	sig.
MSC1	93.56	8.17	-.716	.476
MSC2	96.00	13.30		
MSCPE1	97.06	10.45	-.62	.55
MSCPE2	98.5	14.00		
MSCFE1	94.61	10.42	-.56	.58
MSCFE2	96.83	14.11		
MSCUE1	95.11	8.86	-1.51	.15
MSCUE2	98.72	9.30		
MSCME1	94.94	6.21	.76	.46
MSCME2	92.94	2.42		
EIS1	130.67	10.87	1.73	.10
EIS2	126.44	11.73		

Note. MSC1 = Mayer-Salovey-Caruso Emotional Intelligence Test Pre-test, MSC2 = Mayer-Salovey-Caruso Emotional Intelligence Test Post-test, MSCPE1 = Perceiving Emotions Pretest MSCPE2 = Perceiving Emotions Posttest, MSCFE1 = Facilitating Emotions Pretest MSCFE2 = Facilitating Emotions Posttest MSCUE1 Understanding Emotions Pretest MSCUE2 = Understanding Emotions Posttest MSCME1 = Managing Emotions Pretest MSCME2 = Managing Emotions Posttest EIS1 = Emotional Intelligence Scale Pretest EIS2 = Emotional Intelligence Scale Posttest

APPENDIX A13
TABLE 13

Table 13. Paired Samples T-tests for Control Conditions.

	Mean	SD	t-stat	sig.
MSC1	91.13	13.03	-.664	.53
MSC2	92.63	14.59		
MSCPE1	92.38	17.00	.323	.76
MSCPE2	91.38	14.12		
MSCFE1	96.50	8.86	-.599	.57
MSCFE2	98.25	11.52		
MSCUE1	95.25	9.16	-1.69	.14
MSCUE2	100.63	12.59		
MSCME1	90.25	7.42	-.132	.90
MSCME2	90.63	13.36		
EIS1	138.50	19.58	2.12	.071
EIS2	125.75	11.76		

Note. MSC1 = Mayer-Salovey-Caruso Emotional Intelligence Test Pre-test, MSC2 = Mayer-Salovey-Caruso Emotional Intelligence Test Post-test, MSCPE1 = Perceiving Emotions Pretest MSCPE2 = Perceiving Emotions Posttest, MSCFE1 = Facilitating Emotions Pretest MSCFE2 = Facilitating Emotions Posttest MSCUE1 Understanding Emotions Pretest MSCUE2 = Understanding Emotions Posttest MSCME1 = Managing Emotions Pretest MSCME2 = Managing Emotions Posttest EIS1 = Emotional Intelligence Scale Pretest EIS2 = Emotional Intelligence Scale Posttest

APPENDIX A14
TABLE 14

Table 14. Paired Samples T-tests of Sixteen Personality Factor Inventory Global Scales and Reasoning Scale for all Participants (Counseling and Control Conditions)

	Mean	t-stat	sig.
16PFB1	6.54	-2.56	.017
16PFB2	7.23		
16PFEX1	6.49	2.323	.029
16PFEX2	5.86		
16PFAN1	4.21	-1.206	.239
16PFAN2	4.49		
16PFTM1	2.95	-2.884	.008
16PFTM2	3.88		
16PFIN1	3.64	-12.396	.000
16PFIN2	6.06		
16PFSC1	5.28	1.656	.110
16PFSC2	4.91		

Note. 16PFB = Sixteen Personality Factor Inventory B (Reasoning) Scale, 16EX = Sixteen Personality Factor Inventory Extraversion Scale, 16PFAN = Sixteen Personality Factor Inventory Anxiety Scale, 16PFIN = Sixteen Personality Factor Inventory Independence Scale, 16PFSC = Sixteen Personality Factor Inventory Self Control Scale. 1 denotes pretest measure, and 2 denotes post-test measurement.

APPENDIX A15
TABLE 15

Table 15. Paired Samples T-tests of Sixteen Personality Factor Inventory Global Scales and Reasoning Scale for Counseling Conditions.

	Mean	t-stat	sig.
16PFB1	6.28	-1.37	.19
16PFB2	6.72		
16PFEX1	6.44	.920	.372
16PFEX2	6.16		
16PFAN1	4.48	-1.993	.062
16PFAN2	4.95		
16PFTM1	2.58	-2.018	.062
16PFTM2	3.43		
16PFIN1	3.79	-9.304	.000
16PFIN2	6.15		
16PFSC1	5.29	1.212	.241
16PFSC2	4.93		

Note. 16PFB = Sixteen Personality Factor Inventory B (Reasoning) Scale, 16EX = Sixteen Personality Factor Inventory Extraversion Scale, 16PFAN = Sixteen Personality Factor Inventory Anxiety Scale, 16PFIN = Sixteen Personality Factor Inventory Independence Scale, 16PFSC = Sixteen Personality Factor Inventory Self Control Scale. 1 denotes pretest measure, and 2 denotes post-test measurement.

APPENDIX A16
TABLE 16

Table 16. Paired Samples T-tests of Sixteen Personality Factor Inventory Global Scales and Reasoning Scale for Control Conditions.

	Mean	t-stat	sig.
16PFB1	6.54	-2.56	.02
16PFB2	7.23		
16PFEX1	6.49	2.32	.03
16PFEX2	5.86		
16PFAN1	4.21	-1.21	.24
16PFAN2	4.49		
16PFTM1	2.95	-2.88	.01
16PFTM2	3.88		
16PFIN1	3.64	-12.40	.00
16PFIN2	6.06		
16PFSC1	5.28	1.66	.11
16PFSC2	4.91		

Note: 16PFB = Sixteen Personality Factor Inventory B (Reasoning) Scale, 16EX = Sixteen Personality Factor Inventory Extraversion Scale, 16PFAN = Sixteen Personality Factor Inventory Anxiety Scale, 16PFIN = Sixteen Personality Factor Inventory Independence Scale, 16PFSC = Sixteen Personality Factor Inventory Self Control Scale. 1 denotes pretest measure, and 2 denotes post-test measurement.

APPENDIX B

DEMOGRAPHIC QUESTIONNAIRE

Please answer the following questions:

1. Age (in years) _____
2. Gender: male ___ female ___
3. Ethnicity (check one): Native American ____, African American ____, Hispanic ____, Asian-American ____, Caucasian ____, Other (please indicate) _____
4. Program of study (check one): Counseling ____, Other (please indicate) _____
5. Have you taken the GRE (check one)? Yes ___ No ____. If Yes, please indicate your scores on the following items: Verbal ____, Quantitative ____, Analytical ____, Subject _____.
6. Have you taken the GMAT (check one)? Yes ___ No ____. If yes, please indicate your score here _____.
7. Have you taken the Miller's Analogies Test? Yes ___ No ____. If yes, please indicate your score here _____.

As stated in the consent form, your responses will be confidential and will only be recognized by a participant number.

APPENDIX C

CONSENT FORM COUNSELING STUDENTS

Information About and Consent to Participate in the Project: Emotional Intelligence and Performance in a Graduate School Counseling Program (Counseling Version)

Investigator: Gregory J. Gibson, M.A.
Advisor: Kara Wettersten, Ph.D.

You are being asked to participate in a research project conducted by Mr. Gregory J. Gibson, a doctoral student of counseling psychology and Dr. Kara Wettersten, faculty advisor, both of the Department of Counseling at the University of North Dakota. The primary purpose of this research study is to examine the predictive success of emotional intelligence (EI) questionnaires on counseling performance in a graduate school counseling program. The second goal is to examine changes in emotional intelligence, as measured with EI questionnaires as one continues through the counseling program.

Your commitment to the study will consist of the completion of two emotional intelligence (or EI) questionnaires, a personality questionnaire, and a demographics questionnaire as you begin your first few weeks of a graduate program. Completion of all the questionnaires will take approximately one and a half hours to complete. You will also be expected to complete both EI questionnaires again following the first year of the program to observe changes in emotional intelligence responding over time. A third questionnaire, called the survey of recent life events will also be completed at this time. In all, this second administration should take less than one hour to complete. Upon completing this first packet of questionnaires (1. demographics questionnaire; 2. two EI tests; 3. 16 Personality Factor Questionnaire) and signing this informed consent, you will be expected to send all information in the self addressed stamped envelope provided within two weeks of receiving this packet. From there, you will receive a letter of appreciation from the principle investigator and your name will be entered into a draw for three prizes (a scholarly package, an entertainment package, and a mixed package). A second package of questionnaires will be delivered to the school and placed in your mailbox by May, 2003. The package will contain the two emotional intelligence questionnaires and the survey of recent life events that measures the amount of life events and changes that you had been exposed to over the past year. The expectation is that it will be completed and returned upon three weeks of its receipt. The draw would be carried out one week or two following receipt of all the questionnaires and the winners will be notified via the email address posted on their entry slips, also enclosed in the first package.

Your faculty advisor will also be given an evaluation form that she/he will complete at the end of the academic year. The evaluation will be based on practitioner/ counseling skills and interpersonal effectiveness.

DISCOMFORTS, INCONVENIENCE, AND RISKS: Some counseling students may feel uncomfortable with the notion of having their advisors evaluate their performances and reporting this to others (in this case, the principle investigator) early in their academic development (after the first year in the program). Moreover, it may be uncomfortable to report undergraduate GPA, GRE,

GMAT, and/ or MAT scores. However, the results are confidential and the evaluation form will be identified only by a participant number that will be assigned once the first questionnaires are completed and received. Your name will not be associated with your questionnaires or the evaluation form. Also, the risk of others' knowing this information will be lessened in that the principle investigator will be the only individual handling raw data and that raw data will only be identified through participant numbers as opposed to proper names or affiliations.

There are virtually no risks associated with the completion of the emotional intelligence inventories. The participant may feel inconvenienced in completing the questionnaires, which will take approximately one and a half hours to complete in September and approximately one hour to complete again in May. You may withdraw from the investigation at any time without academic penalty. Moreover, your responses will be confidential and identifiable only as a participant number to the investigator. The 16 Personality Factor questionnaire is a questionnaire that measures one's personal style and characteristics. It is not a measure of pathology or mental illness. However, if you feel uncomfortable talking about personal information, such as interpersonal styles or other life areas, or if revealing this information brings up some personal issues after completion, I encourage you to speak to someone about your feelings. The University Counseling Center or counseling crisis lines are available in the community that provides this service to the public free of charge.

POTENTIAL BENEFITS: The potential benefits of participating in this study are primarily knowing that you have made a contribution to research and thus to society. Emotional Intelligence has been cited in the literature as being an important contributor to future success professionally and personally. A primary benefit of this project, socially, is the potential toward increasing the emotional intelligence of individuals through skills and experiences acquired in a counseling training program. A further benefit to the scientific literature would be a greater understanding of the construct of emotional intelligence; is it static or can it be acquired and improved upon? If emotional intelligence is observed to be acquired and/or improved upon while in the counseling psychology program, the skills and experiences associated with counseling training may be incorporated into other programs at various ages and skill levels and thus may contribute to a student's future professional and personal success.

The benefits to the individual participant include 1) knowledge of potential importance of the findings of this study and being part of it, 2) receipt of a letter of appreciation, and 3) an opportunity to win one of three prizes awarded after data collection in May – June 2003.

CONFIDENTIALITY: Any information obtained in connection with this study and that can be identified with the participant will remain confidential. Information resulting from this study is for research purposes and may be published; however, you will not be identified by name in any such publications or presentation of results. Your decision to participate or not participate in this study will not prejudice your future relations with the investigator, the Department of Counseling or UND. Moreover, you will not receive academic penalty for withdrawal. You will also be given a copy of this form for your records. If your copy is lost or damaged a replacement photocopy can be provided upon request.

Data from this study will be kept in a locked file in the investigator's office for a period of seven years after the study has ended and will then be destroyed. Signed Consent forms will be kept in a locked file in the investigator's office, separate from the actual research data collected. Consent form will be kept separate from the rest of the data for seven years and will then be destroyed.

For more information regarding this study now or in the future, please contact Gregory J. Gibson, M.A., the investigator, by calling (701)777-9863 or gregory_gibson@und.nodak.edu. You may also contact the faculty advisor, Dr. Kara Wettersten, at (701) 777- 3743 or kara_wettersten@und.nodak.edu. The mailing address for both individuals is:
Department of Counseling
PO Box 8255
University of North Dakota
Grand Forks, North Dakota
58202

You may call UND's Office of Research and Program Development at 777-4279.

I have read all of the above and willingly agree to participate in this study.

Participant's signature Date

I further agree to have Dr. _____ (clinical advisor's name) complete an evaluation of my graduate school performance using the form provided and I know that this information is confidential and will only be identified by an assigned participant number.

Participant's signature Date

APPENDIX D

CONSENT FORM CONTROL CONDITION

Information About and Consent to Participate in the Project: Emotional Intelligence and Performance in a Graduate School Counseling Program (Version Two).

Investigator: Gregory J. Gibson, M.A.

Advisor: Kara Wettersten, Ph.D.

You are being asked to participate in a research project conducted by Mr. Gregory J. Gibson, a doctoral student of counseling psychology and Dr. Kara Wettersten, faculty advisor, both of the Department of Counseling at the University of North Dakota. The primary purpose of this research study is to examine the predictive success of emotional intelligence (EI) questionnaires on counseling performance in a graduate school counseling program. The second goal is to examine changes in emotional intelligence, as measured with EI questionnaires as one continues through a graduate program.

Your commitment to the study will consist of the completion of two emotional intelligence (or EI) questionnaires, a personality questionnaire, and a demographics questionnaire as you begin your first few weeks of a graduate program. Completion of all the questionnaires will take approximately one and a half hours to complete. You will also be expected to complete both EI questionnaires again following the first year of the program to observe changes in emotional intelligence responding over time. A third questionnaire, called the survey of recent life events will also be completed at this time. In all, this second administration should take less than one hour to complete. Upon completing this

first packet of questionnaires (1. demographics questionnaire; 2. two EI tests; 3. 16 Personality Factor Questionnaire) and signing this informed consent, you will be expected to send all information in the self addressed stamped envelope provided within two weeks of receiving this packet. From there, you will receive a letter of appreciation from the principle investigator and your name will be entered into a draw for three prizes (a scholarly package, an entertainment package, and a mixed package). A second package of questionnaires will be delivered to the school and placed in your mailbox by May, 2003. The package will contain the two emotional intelligence questionnaires and the survey of recent life events that measures the amount of life events and changes that you had been exposed to over the past year. The expectation is that it will be completed and returned upon three weeks of its receipt. The draw would be carried out one week or two following receipt of all the questionnaires and the winners will be notified via the email address posted on their entry slips, also enclosed in the first package.

DISCOMFORTS, INCONVENIENCE, AND RISKS: Some students may feel uncomfortable with the notion of reporting undergraduate GPA, GRE, GMAT, and/ or MAT scores. However, the results are confidential and the evaluation form will be identified only by a participant number that will be assigned once the first questionnaires are completed and received. Your name will not be associated with your questionnaires or the evaluation form. Also, the risk of others' knowing this information will be lessened in that the principle investigator will be the only individual handling raw data and that raw data will only be identified through participant numbers as opposed to proper names or affiliations.

There are virtually no risks associated with the completion of the emotional intelligence inventories. The participant may feel inconvenienced in completing the questionnaires, which will take approximately one and a half hours to complete in September and approximately one hour to complete again in May. You may withdraw from the investigation at any time without academic penalty. Moreover, your responses will be confidential and identifiable only as a participant number to the investigator. The 16 Personality Factor questionnaire is a questionnaire that measures one's personal style and characteristics. It is not a measure of pathology or mental illness. However, if you feel uncomfortable talking about personal information, such as interpersonal styles or other life areas, or if revealing this information brings up some personal issues after completion, I encourage you to speak to someone about your feelings. The University Counseling Center or counseling crisis lines are available in the community that provides this service to the public free of charge.

POTENTIAL BENEFITS: The potential benefits of participating in this study are primarily knowing that you have made a contribution to research and thus to society. Emotional Intelligence has been cited in the literature as being an important contributor to future success professionally and personally. A primary benefit of this project, socially, is the potential toward increasing the emotional intelligence of individuals through skills and experiences acquired in a graduate program. A further benefit to the scientific literature would be a greater understanding of the construct of emotional intelligence; is it static or can it be acquired and improved upon? If emotional intelligence is observed to be acquired and/or improved upon while in a counseling psychology program, the skills and experiences associated with counseling training may be incorporated into other programs at various ages and skill levels and thus may contribute to a student's future professional and personal success.

The benefits to the individual participant include 1) knowledge of potential importance of the findings of this study and being part of it, 2) receipt of a letter of appreciation, and 3) an opportunity to win one of three prizes awarded after data collection in May – June 2003.

CONFIDENTIALITY: Any information obtained in connection with this study and that can be identified with the participant will remain confidential. Information resulting from this study is for research purposes and may be published; however, you will not be identified by name in any such publications or presentation of results. Your decision to participate or not participate in this study will not prejudice your future relations with the investigator, the Department of Counseling or UND. Moreover, you will not receive academic penalty for withdrawal. You will also be given a copy of this form for your records. If your copy is lost or damaged a replacement photocopy can be provided upon request.

Data from this study will be kept in a locked file in the investigator's office for a period of seven years after the study has ended and will then be destroyed. Signed Consent forms will be kept in a locked file in the investigator's office, separate from the actual research data collected. Consent form will be kept separate from the rest of the data for seven years and will then be destroyed.

For more information regarding this study now or in the future, please contact Gregory J. Gibson, M.A., the investigator, by calling (701)777-9863 or gregory_gibson@und.nodak.edu. You may also contact the faculty advisor, Dr. Kara Wettersten, at (701) 777- 3743 or kara_wettersten@und.nodak.edu. The mailing address for both individuals is:

**Department of Counseling
PO Box 8255
University of North Dakota
Grand Forks, North Dakota
58202**

You may call UND's Office of Research and Program Development at 777-4279.

I have read all of the above and willingly agree to participate in this study.


Participant's signature

Date

APPENDIX E

EXAMPLE MSCEIT ITEMS

Identifying Emotions

	Indicate the emotions expressed by this face.					
	Happiness	1	2	3	4	5
	Fear	1	2	3	4	5
	Sadness	1	2	3	4	5

Using Emotions

What mood (s) might be helpful to feel when meeting in-laws for the very first time?

	<i>Not Useful</i>		<i>Useful</i>		
Tension	1	2	3	4	5
Surprise	1	2	3	4	5
Joy	1	2	3	4	5

Understanding Emotions

Tom felt anxious, and became a bit stressed when he thought about all the work he needed to do. When his supervisor brought him an additional project, he felt _____. (Select the best choice.)

- a) Overwhelmed
- b) Depressed
- c) Ashamed
- d) Self Conscious
- e) Jittery

Managing Emotions

Debbie just came back from vacation. She was feeling peaceful and content. How well would each action preserve her mood?

Action 1: She started to make a list of things at home that she needed to do.

Very Ineffective..1.....2.....3.....4.....5..Very Effective

Action 2: She began thinking about where and when she would go on her next vacation.

Very Ineffective..1.....2.....3.....4.....5..Very Effective

Action 3: She decided it was best to ignore the feeling since it wouldn't last anyway.

Very Ineffective..1.....2.....3.....4.....5..Very Effective

APPENDIX F

EMOTIONAL INTELLIGENCE SCALE (Schutte, N., Malouffe, J., Hall, L., Haggerty, D., Cooper, J., Golden, C., & Dornheim, L., 1998).

The 33 item emotional intelligence scale

Please read each item carefully and circle ONE of the numbers from each item that best describes you.

- (1) I know when to speak about my personal problems to others
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (2) When I am faced with obstacles, I remember times I faced similar obstacles and overcame them
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (3) I expect that I will do well on most thing I try
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (4) Other people find it easy to confide in me
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (5) I find it hard to understand the non-verbal messages of other peoples
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (6) Some of the major events of my life have led me to re-evaluate what is important and not important
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (7) When my mood changes, I see new possibilities
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (8) Emotions are one of the things that make my life worth living
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (9) I am aware of my emotions as I experience them
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (10) I expect good things to happen
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5

- (11) I like to share my emotions with others
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (12) When I experience a positive emotion, I know how to make it last
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (13) I arrange events others enjoy
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (14) I seek out activities that make me happy
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (15) I am aware of the non-verbal messages I send to others
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (16) I present myself in a way that makes a good impression on others
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (17) When I am in a positive mood, solving problems is easy for me
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (18) By looking at their facial expressions, I recognize the emotions people are experiencing
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (19) I know why my emotions change
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (20) When I am in a positive mood, I am able to come up with new ideas
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (21) I have control over my emotions
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (22) I easily recognize my emotions as I experience them
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (23) I motivate myself by imagining a good outcome to tasks I take on
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (24) I compliment others when they have done something well
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5
- (25) I am aware of the non-verbal messages other people send
Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5

- (26) When another person tells me about an important event in his or her life, I almost feel as though I have experienced this event myself
 Strongly Disagree 1 Disagree 2 Neutral 3 Agree 4 Strongly Agree 5
- (27) When I feel a change in emotions, I tend to come up with new ideas
 Strongly Disagree 1 Disagree 2 Neutral 3 Agree 4 Strongly Agree 5
- (28) When I am faced with a challenge, I give up because I believe I will fail
 Strongly Disagree 1 Disagree 2 Neutral 3 Agree 4 Strongly Agree 5
- (29) I know what other people are feeling just by looking at them
 Strongly Disagree 1 Disagree 2 Neutral 3 Agree 4 Strongly Agree 5
- (30) I help other people feel better when they are down
 Strongly Disagree 1 Disagree 2 Neutral 3 Agree 4 Strongly Agree 5
- (31) I use good moods to help myself keep trying in the face of obstacles
 Strongly Disagree 1 Disagree 2 Neutral 3 Agree 4 Strongly Agree 5
- (32) I can tell how people are feeling by listening to the tone of their voice
 Strongly Disagree 1 Disagree 2 Neutral 3 Agree 4 Strongly Agree 5
- (33) It is difficult for me to understand why people feel the way they do
 Strongly Disagree 1 Disagree 2 Neutral 3 Agree 4 Strongly Agree 5

Note: The authors permit free use of the scale for research and clinical purposes.

APPENDIX G

SITE SUPERVISOR'S EVALUATION OF STUDENT COUNSELOR'S PERFORMANCE

SUGGESTED USE: This form is to be used to check performances in counseling practicum. The form may be completed after each supervised counseling session or may cover several supervisions over a period of time. The form is appropriate for individual or group counseling.

DIRECTIONS: The supervisor is to circle a number that best evaluates the student counselor on each performance. The low, medium and high distinctions represent where the supervisee falls in a normal distribution relative to other students you have worked with.

General Supervision Comments	Lowest (<25% of students)	Average (mid 50%)	Superior (>75% of students)				
1. Demonstrates a personal commitment in developing professional competencies	1	2	3	4	5	6	
2. Invests time and energy in becoming a counselor	1	2	3	4	5	6	
3. Accepts and uses constructive criticism to enhance self-development and counseling skills	1	2	3	4	5	6	
4. Engages in open, comfortable, and clear communication with peers and supervisors	1	2	3	4	5	6	
5. Recognizes own competencies and skills and shares these with peers and supervisors	1	2	3	4	5	6	
6. Recognizes own deficiencies and actively works to overcome them with peers and supervisors	1	2	3	4	5	6	
7. Completes case reports and records punctually and conscientiously	1	2	3	4	5	6	
The Counseling Process							
8. Researches the referral prior to the first interview	1	2	3	4	5	6	
9. Keeps appointments on time	1	2	3	4	5	6	
10. Begins the interview smoothly	1	2	3	4	5	6	
11. Explains the nature and objectives of counseling when appropriate	1	2	3	4	5	6	
12. Is relaxed and comfortable in the interview	1	2	3	4	5	6	
13. Communicates interest in and acceptance of the client	1	2	3	4	5	6	
14. Facilitates client expression of concerns and feelings	1	2	3	4	5	6	
15. Focuses on the content of the client's problem	1	2	3	4	5	6	
16. Recognizes and resists manipulation by the client	1	2	3	4	5	6	
17. Recognizes and deals with positive affect of the client	1	2	3	4	5	6	
18. Recognizes and deals with negative affect of the client	1	2	3	4	5	6	
19. Is spontaneous in the interview	1	2	3	4	5	6	
20. Uses silence effectively in the interview	1	2	3	4	5	6	
21. Is aware of own feelings in the counseling session	1	2	3	4	5	6	
22. Communicates own feelings to the client when appropriate	1	2	3	4	5	6	
23. Recognizes and skillfully interprets the client's covert messages	1	2	3	4	5	6	
24. Facilitates realistic goal setting with the client	1	2	3	4	5	6	

25. Encourages appropriate action-step planning with the client	1	2	3	4	5	6
26. Enjoys judgment in the timing and use of different techniques	1	2	3	4	5	6
27. Initiates periodic evaluation of goals, action-steps, and process during counseling	1	2	3	4	5	6
28. Explains, administers, and interprets tests correctly	1	2	3	4	5	6
29. Terminates the interview smoothly	1	2	3	4	5	6

The Conceptualization Process

30. Focuses on specific behaviors and their consequences, implications, and contingencies	1	2	3	4	5	6
31. Recognizes and pursues discrepancies and meaning of inconsistent information	1	2	3	4	5	6
32. Uses relevant case data in planning both immediate and long-range goals	1	2	3	4	5	6
33. Uses relevant case data in considering various strategies and their implications	1	2	3	4	5	6
34. Bases decisions on a theoretically sound and consistent rationale of human behavior	1	2	3	4	5	6
35. Is perceptive in evaluating the effects of own counseling techniques	1	2	3	4	5	6
36. Demonstrates ethical behavior in the counseling activity and case management	1	2	3	4	5	6

APPENDIX H

SURVEY OF RECENT LIFE EVENTS

Scoring directions: Mark the changes that may have happened in your life within the last 9 months by circling the event and number. If it happened more than once, put the number of times the event happened next to the circled number.

	LCU Values
Family	
Death of spouse	100
Divorce	73
Marital separation	65
Death of close family member	63
Marriage	50
Marital reconciliation	45
Major change in health of family	44
Pregnancy	40
Addition of new family member	39
Major change in arguments with spouse	35
Son or daughter leaving home	29
In-law troubles	29
Spouse starting or ending work	26
Major change in family get-togethers	15
Personal	
Detention in jail	63
Major personal injury or illness	53
Sexual difficulties	39
Death of a close friend	37
Outstanding personal achievement	28
Start or end of formal schooling	26
Major change in living conditions	25
Major revision of personal habits	24
Changing to a new school	20
Change in residence	20
Major change in recreation	19
Major change in church activities	19
Major change in sleeping habits	16
Major change in eating habits	15
Vacation	13
Christmas	12
Minor violations of the law	11

Work

Being fired from work	47
Retirement from work	45
Major business adjustment	39
Changing to different line of work	36
Major change in work responsibilities	29
Trouble with boss	23
Major change in working conditions	20

LCU Values

Major change in financial state	38
Mortgage or loan over \$10,000	31
Mortgage foreclosure	30
Mortgage or loan less than \$10,000	17

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