The Relationship Between Emotional Intelligence and Personality Type in Counselor Education Students

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The Relationship Between Emotional Intelligence and Personality Type in Counselor Education Students

A Dissertation

Submitted to the Graduate Faculty of the University of New Orleans in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Counselor Education

by

Melissa Walker Fleming, LPC-S, NCC

B. A. Louisiana Tech University, 2008
M. Ed. University of New Orleans, 2011

August, 2020
Dedication

I dedicate my dissertation to my favorite research assistants: my daughter Evelyn, who shared a desk with me as she worked on her “Frozen” schoolwork; my daughter Clara, whose baby smiles motivated me to keep going; and my daughter Chloe, whose baby kicks reminded me that this research was worth finishing. I am proud to be your mom and look forward to many conversations about emotional intelligence and personality type in the years to come.

I also dedicate my research to my grandfather, Capt. W. O. Watson, Jr., an ESFP who embodied emotional intelligence, and, in part, inspired my research study. His exceptional ability to connect with people and manage relationships, while keeping logic foremost in mind, propelled him to great success. Although he is sorely missed, his legacy endures.
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Abstract

Although emotional intelligence and personality are extensively researched topics, the two concepts are rarely studied within the context of counselor education. Thus, the purpose of the present research was to explore the relationships between 134 counseling students’ demographics, academic experience, emotional intelligence, and personality types who were enrolled in Council for Accreditation of Counseling and Related Educational Programs (CACREP) accredited programs in southern Louisiana and Texas. Students completed a Demographic Survey, the Mayer-Caruso-Salovey Emotional Intelligence Test (MSCEIT), and Jung’s Typology Test (JTT™). The ability model of emotional intelligence that was developed by Salovey and Mayer (1990) was used as the conceptual framework for the research, which includes four branches: a) emotional perception, b) emotional integration, c) emotional understanding, and d) emotional management. The results included descriptive statistics that indicated female counseling students had higher overall emotional intelligence and were more emotionally perceptive and integrative than male students. Also, younger counseling students were more emotionally integrative than older students. Correlations for students’ race and overall emotional intelligence, emotional integration, and understanding were significant. Counseling students with an affective theoretical orientation were more emotionally understanding than students with a cognitive theoretical orientation. Students with cognitive or affective theoretical orientations preferred Intuition over Sensing in their personality types. Five multiple regression analyses were analyzed. First, students’ gender, race, number of coursework hours completed, and number of years of graduate study explained 16.8% of the variance in their overall emotional intelligence scores. Second, for emotional perception, students’ gender and the
number of years of graduate study accounted for 6.5% of the variance. Third, students’ gender, age, and race explained 14.3% of the variance in emotional integration. Fourth, for emotional understanding, students’ race, number of coursework hours completed, number of years of graduate study, and students with personality types of Introversion and Perceiving accounted for 30.7% of the variance. Finally, students’ age and Feeling personality type explained 6.9% of the variance in emotional management.

Keywords: Emotional intelligence, personality type, counselor education graduate students, ability model of EI, counseling, theoretical orientation
Chapter I

Introduction

In chapter one, an overview of the proposed exploratory research describing the levels of emotional intelligence (EI) and personality types of students enrolled in counselor education graduate programs are provided. The purpose, significance, framework, and problem statement are discussed. An overview of the research methods and research questions are provided. The research study’s limitations, delimitations, and assumptions are listed. Additionally, the definitions of key terms are included.

Overview

Researchers struggle to define intelligence as a construct (Sternberg, 2000). Legg and Hutter (2006) stated that throughout the last century, many definitions and models of intelligence have been proposed. Weschler (1958) suggested that intelligence is an individual’s capacity to act intentionally, think rationally, and deal effectively with his or her environment. In comparison, Terman (1921) pointed to the importance of abstract thinking in intelligence. As further research surrounding intelligence evolved, a specific type of intelligence, EI was studied (Salovey & Mayer, 1990). Over the past 25 years, scholars developed various models of EI with each model varying in the definitions and scope of EI. Of the existing models of EI, three main models emerged: a) ability (Salovey & Mayer, 1990), b) mixed (Bar-On, 1997; Goleman, 1995), and c) trait (Mayer et al., 2000b; Petrides & Furnham, 2000). One of the most researched models is Salovey’s and Mayer’s (1990) ability model. The authors originally explained the term EI as a "subset of social intelligence that involves the ability to monitor one's own and others’ feelings and emotions to discriminate among them and to use these feelings to guide one's thinking and
actions” (p. 190). Their ability model of EI features four branches that include emotional perception, emotional integration, emotional understanding, and emotional management.

Educational research suggested that EI can be viewed on a spectrum in which some individuals may excel in EI, while others may struggle experiencing EI; however, EI can be acquired through training and teaching (Dulewicz & Higgs, 2000; Easton et al., 2008; Goldenberg et al., 2006; Langley, 2000; Martinez-Pons, 2000; Mayer et al., 1999; Watkin, 2000). Additional research indicated that high levels of EI were related to positive outcomes; such as prosocial behavior, parental warmth, and healthy peer and family relationships (Brackett et al., 2004; Brackett et al., 2006; Mayer et al., 1999; Rice 1999; Salovey et al., 2001); positive social relationships (Lopes et al., 2003); greater self-reported confidence and less negative interpersonal behaviors (Brackett et al., 2006; Lopes et al., 2004); increased empathy, social competence, and pleasant demeanor (Brackett et al., 2006; Lopes et al., 2004, Lopes et al., 2005); better work performance and success (Cote & Miners, 2006; Elfenbein et al., 2007; Rubin et al., 2005); lower ratings of depression, greater life satisfaction, and higher self-esteem (Bastain et al., 2005; Gohm et al., 2005; Matthews et al., 2006); and fewer unhealthy behaviors; such as smoking, alcohol, illegal drug use, and internet addiction (Brackett et al., 2004; Engelberg & Sjoberg, 2000; Trinidad & Johnson, 2002).

In the counseling literature, Mayer and Salovey (1997) found that individuals who scored high on EI assessments also scored high on scales of self-reported empathy ($r = .33$, $p < .05$, Mayer et al., 2000b). Additional research suggested that EI is a significant construct in the efficacy of counselors (Barbash, 2015; Kaplowitz et al., 2011; Rieck & Callahan, 2013). Barbash (2015) proposed that students who pursue careers in the helping profession have high levels of EI. Martin et al. (2004) found that counseling students and professional counselors possess
higher scores in EI than the general population, leading the authors to suggest that EI may be one of the core attributes of professional counselors. Mayer (2000) proposed that an ability-based EI assessment can be used to identify individuals who lack EI qualities such as emotional understanding, empathic listening, and emotional management, which is needed in a career such as counseling. Thus, research on EI may be needed in counselor education training to assess graduate students’ EI and to train students in the importance of EI when working with clients.

A separate construct from EI is personality, which is described as an individual’s preferred manner of thinking, feeling, and behaving (Mayer et al., 2000a; Saville & Holdsworth, 1999). Many theories on the development and management of personality have emerged (Pervin, 1989), with Jung’s theory as one of the most widely used and cited. In his theory, Jung identified four dichotomies to categorize how an individual perceives information and cultivates decisions: a) general attitude (i.e., expression toward Extroversion (E) or Introversion (I); Higgs, 2001), b) perception (i.e., information either through Sensing (S) or Intuition (N); Kennedy & Kennedy, 2004), c) process (i.e., information with either Thinking (T) or Feeling (F); Friedman & Schustack, 2009), and d) implementation (i.e., information with either Judging (J) or Perceiving (P); Myers, 1962). The four dichotomies yield 16 personality types: ISTJ, ISFJ, INFJ, INTJ, ISTP, ISFP, INFP, INTP, ESTP, ESFP, ENFP, ENTP, ESTJ, ESFJ, ENFJ, ENTJ.

Jung’s theory assumes that an individual is born with personality preferences that are fluid and are guided by education, society, and personal intentions (Higgs, 2001; Jung, 1917; Myers, 1980; Myers & McCalley, 1985; Spoto, 1989). According to Bayne (1995a), counselors’ awareness of their own personality type could alter their counseling approach and enhance their efficacy with clients. Additional research determined a relationship between personality type and a counselor’s theoretical orientation (Erickson, 1993; Frederickson, 1991; McBride & Martin,
Further research in counselor education is needed to assess graduate students’ personality type and theoretical orientation as they relate to their EI.

**Purpose of the Study**

The purpose of the present research was to determine if a relationship exists between counseling graduate students’ academic experience in a counselor education program and their level of EI as measured by the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; 2011) as well as students' personality type as measured by the Jung Typology Test (JTT™) and their theoretical orientation. Findings from the present research will contribute to the gap in literature on EI in the field of counselor education.

**Significance of the Study**

Easton et al. (2008) suggested that EI is a core characteristic of counselors. Research by Kaplowitz et al. (2011) indicated that therapists with higher EI achieved better therapist-rated outcome results, had lower dropout rates with clients, and experienced increased client compliance with treatment. Similarly, Codier et al. (2010) found that the association between EI and counselors’ performance with counseling skills extended to positive client outcomes. According to Ivey and Ivey (2003) and Miville et al. (2006); effective counselors are capable of observing and accurately interpreting clients’ feelings by perceiving both stated and unstated emotional cues. Barbash (2015) suggested that counselors must be adept at emotional perception (Branch One of EI) and emotional understanding (Branch Three of EI) in order to be effective in sessions with clients. Empathy, one of the core characteristics of counselors, was found to be moderately related to EI and is directly related to Branch One of EI, emotional perception, as well as branches two and three, emotional integration and emotional understanding (Barbash, 2015; Brackett et al., 2006; Mayer & Salovey, 1997; Miars et al., 1997; Miville et al., 2006).
Counselors may utilize the fourth branch, emotional *management*, when dealing with countertransference that may arise with clients (Barbash, 2015). All four branches of EI are necessary to develop a strong therapeutic alliance, thereby demonstrating to clients that counselors are competent, caring, flexible, interested, understanding, and responsive (Barbash, 2015; Hersoug et al., 2009; Novotney, 2013). Additional research indicated a significant relationship exists between counselors’ personality type and their choice of theoretical orientation (Dodd & Bayne, 2006; Erickson, 1993). Research also indicated that counselors’ personality type impacts their priorities and agendas in sessions (Briggs-Myers, 1995; Churchill & Bayne, 1998; Robbins & Turley, 2016). However, a gap in the literature exists regarding EI and personality type of counseling students. Research should be conducted to examine if a relationship exists between counselors’ EI and personality types and the significance. If a link between EI and counselor education is established, then EI could serve as a valuable tool in the training of counselor education students.

**Conceptual Framework**

A conceptual framework should directly stem from a type of argument or substantive theory to clarify the concepts and propose relationships among concepts (Camp, 2001). A framework provides context for interpreting a research study’s findings to explain the observations that occurred during the research. For the present research, Salovey’s and Mayer’s ability model of EI was used as the conceptual framework.

In 1990, Salovey and Mayer first coined the construct of EI. Further research with their model of EI was conducted and their current research defines EI as “the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the
ability to regulate emotions to promote emotional and intellectual growth” (Mayer & Salovey, 1997, p. 35). EI is limited to an individual’s abilities in reasoning about emotions and using emotions to improve reasoning (Mayer et al., 2008). Ability EI theorists believe that the construct of EI meets the criteria for a traditional intelligence because EI is a mental process differentiated from other intelligences that improves with time and experience (Mayer et al., 1999). Intelligence is characterized as how efficient the cognitive sphere operates (Mayer & Salovey, 1997). Also, EI is a crystalized intelligence that is a memory-dependent ability, meaning EI is the kind of intelligence comprised of knowledge, facts, and skills acquired throughout an individual’s life experiences (Mayer et al., 2003).

Four hierarchical branches, or levels, are included in EI. The first branch involves emotional perception (Mayer et al., 2001). The second branch assesses the emotional integration. The third branch looks at emotional understanding, which is correlated highly with IQ. The fourth and final branch refers to emotional management. The ability model of EI differentiates itself from other EI models with its use of assessment. EI is evaluated on how well individuals perform tasks and solve emotional problems by assessing the four branches of the ability model (Mayer et al., 2003). Unlike other EI assessments, which rely on self-reported data, individuals are assessed on their ability to correctly answer test items (i.e., MSCEIT; Mayer et al., 2008).

According to Knight (2009), greater empirical evidence exists to support the ability model of EI in comparison to other EI models. The ability model more closely aligns with an intelligence model (Mayer et al., 2008). Self-report scales of EI that are used to measure other models of EI were found to have low correlations with measured abilities of perceiving, using, understanding, and/or measuring emotions (Brackett et al., 2006). Self-reports of ability and actual ability of EI, however, are only minimally correlated with intelligence (Paulhus et al., 1998, as cited in Mayer
Mayer et al. (2008) wrote that the mixed model tests include non-ability EI related constructs, such as the need for achievement and self-esteem that increases the degree of construct-irrelevant variance.

**Problem Statement**

The majority of research on EI focuses on the relationships of individuals’ academic, workplace, and overall performance, with little research on the relationship between EI and counseling graduate students’ use of EI (Barbash, 2015). This gap in the literature exists, despite the view that a significant relationship between EI and health professionals’ abilities exist (Barbash, 2015; Romanelli et al., 2006). The Council for the Accreditation of Counseling and Related Educational Programs’ (CACREP) standards for a master’s degree in counselor education are comprehensive with a specific focus on foundation knowledge; such as professional counseling orientation, specific counseling and helping relationships, and basic counseling skills (CACREP, 2015). Counselor education programs require students to participate in training that seeks to increase self-awareness, reflection, and interpersonal counseling skills (Bohecker et al., 2014). Schaefle et al. (2005) stated that research is needed to understand the necessary qualities of effective counselors that would provide implications for counselor education programs and education of counseling students. Rieck and Callahan (2013) stated that EI appears to be a significant therapist ability in facilitating positive client change and could provide important applications in psychology doctoral training programs. EI is a construct that is not widely taught or assessed in counselor education programs; however, if EI plays a role in counselor development, a spotlight on the construct of EI and its importance when training counseling students would benefit students and the counseling profession in general.
Overview of Methods

The proposed research was a quantitative design. Selection of participants was based on a convenience sample of master’s and doctoral level students enrolled in CACREP accredited counselor education programs in southern Louisiana and Texas. To be eligible to participate in the present research, participants were required to be enrolled in a CACREP accredited counselor education master’s or doctoral program. The intended sample size included a minimum of 129 participants, as determined by a G*Power calculation (Heinrich-Heine-Universität Düsseldorf, 2014). Participants completed a Demographic Survey, the MSCEIT, and the JTT™.

Research Questions

The present research study included the following three questions.

Research Question One

What are the descriptive statistics for demographics (i.e., gender, age, race, theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), level of emotional intelligence (i.e., MSCEIT), and personality type (i.e., JTT™) of counselor education graduate students?

Research Question Two

What is the strength of the relationships between counselor education graduate students’ gender, age, race, theoretical orientation, academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education

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graduate study), level of emotional intelligence (i.e., MSCEIT), and personality type (i.e., JTT™)?

**Research Question Three**

Do the demographics (i.e., gender, age, race, theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; number of coursework hours completed, and number of years of study completed in counselor education graduate study) and personality type (i.e., JTT™) predict counselor education graduate students’ level of emotional intelligence (i.e., MSCEIT)?

**Limitations**

Most research studies contain limitations. Terrell (2016) defined limitations as “constraints that are outside of the control of the researcher and inherent to the actual study that could affect the generalizability of the result” (p. 42). For the present research, one limitation was the use of a convenience sample. A second limitation was that the design of the research included a single testing of participants because of time constraints. A third limitation was the length of time it took participants to complete the Demographic Survey as well as the MSCEIT and JTT™. The length of time to participate in the research could limit participant solicitation or completion of all requirements. The final limitation is that participation was voluntary and may have attracted more emotionally intelligent students as they may have already been interested or invested in the topic of EI. Based on the imitations of the present research, the sample size of participants may not have been representative of all master’s and doctoral students enrolled in CACREP accredited counselor education programs or account for regional differences.
Delimitations

Delimitations are defined as “further limitations actively put in place by the researcher in order to control for factors that might affect the results, or to focus more specifically on a problem” (Terrell, 2016, p. 42). The present research was delimited to students enrolled in CACREP accredited counselor education programs located in southern Louisiana and Texas (i.e., University of New Orleans, Xavier University of Louisiana, Southeastern Louisiana University, Louisiana State University and Health Science Center, Nicholls State University, and Lamar University) with the intention of effectively achieving participation. Another delimitation was the purposeful selection of the targeted groups of master’s and doctoral level students enrolled in counselor education programs. Graduate students enrolled in non-counseling programs that are in the helping profession such as psychology or social work were excluded.

Assumptions of the Study

Assumptions of a research study are defined as ideas related to research that are believed to be true, but that cannot be verified (Terrell, 2016). In the present research, the researcher assumed all participants were enrolled in graduate level counselor education programs. Second, the researcher assumed that participants answered the entire assessment to the best of their ability, based on their beliefs and knowledge of their EI and personality. The third assumption was that the participants responded to the assessment instruments honestly. Fourth, as defined by Salovey and Mayer (1990), perception of emotions, integration of emotions, understanding of emotions, and management of emotions were assumed to be concepts related to the construct of EI. Finally, the researcher assumed that the MSCEIT is an accurate measure of participants’ EI and the JTT™ is an accurate measure of the participants’ personality type.
Definition of Terms

**Ability** is the aptitude of an individual in a given domain; skills that are malleable with potential to improve (Subotnik et al., 2011).

**Counselors** are “practitioners who help people manage and overcome mental and emotional disorders and problems with their family and other relationships. They listen to clients and ask questions to help the clients understand their problems and develop strategies to improve their lives” (U. S. Department of Labor, 2016, para. 2).

**Counselor education** is “a distinct academic discipline that has its roots in educational and vocational guidance and counseling, human development, supervision, and clinical practice. The primary focus of a counselor education program is the training and preparation of professional counselors who are competent to practice, abide by the ethics of the counseling profession, and hold strong counseling identities. At the doctoral level, counselor education programs may focus on the preparation and training of future academic professionals who will teach the curriculum of counseling theory and practice and include specialized areas such as Addiction Counseling; Career Counseling; Clinical Mental Health Counseling; Clinical Rehabilitation Counseling; College Counseling and Student Affairs; Marriage, Couple, and Family Counseling; and School Counseling” (CACREP, 2015, p. 44).

**Emotion** “consists of neural circuit (that are at least partially dedicated), or response systems, and a feeling state/process that motivates and organizes cognition and action. Emotion also provides information to the person experiencing it and may include antecedent cognitive appraisals and ongoing cognition including an interpretation of its feeling state, expressions or social-communicative signals, and may motivate approach or avoidant behavior, exercise control/regulation of responses, and be social or relational in nature” (Izard, 2010, p. 366).
Emotional competence is “the demonstration of self-efficacy in emotion-eliciting social transactions” (Bar-On & Parker, 2000, p. 68).

Emotional intelligence “involves the ability to perceive accurately, appraise, and express emotions; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth” (Mayer & Salovey, 1997, p. 35).

Emotional integration is the ability to use emotions to facilitate thoughts (Mayer & Salovey, 1997).

Emotional management is the ability to regulate emotions in oneself (Mayer & Salovey, 1997).

Emotional perception is the ability to recognize emotions in others’ facial and body expressions (Mayer & Salovey, 1997).

Emotional understanding is the ability to recognize one’s and others’ emotions and utilize subsequent information (Mayer & Salovey, 1997).

Empathy is the “ability or process of placing self in others’ shoes, ‘as if one was the other person’” (Rogers, 1959, p. 210).

Intelligence is the mental capacity and accumulation of an individual’s experiences, relations, and correlates that influences an individual’s cognitive performance (Spearman, 1930).

Personality is the development and organization of an individual’s psychological parts (Mayer et al., 2000a).

Personality type is a grouping of preferences on how an individual approaches life, become aware and reach conclusions about the world, according to Jung’s theory of personality type (Higgs, 2001).
Skill is a behavior that can be learned or a predisposition to perform a task effectively, either manually, mentally, or both (William & Darity, 2008).

Talent is an exact ability in a given realm (Burton et al., 2006).

Theoretical orientation is the conceptual framework implemented by a counselor to conceptualize client’s behaviors and experience, treatment plan for effective interventions, and appraise the overall therapeutic process (Poznanski & McLennan, 1995).

Trait emotional intelligence is the model of EI that focuses on “cross-situational consistencies in behavior (manifest in specific traits or behaviors such as empathy, assertiveness, optimism) as opposed to information-processing EI, which concerns abilities (e.g., able to identify and label emotions)” (Petrides & Furnham, 2000, p. 314).
Chapter II

Review of the Literature

In chapter two, the fundamental classes of mental operations and emotions as well as a history of intelligence that supports the theory of EI will be discussed. Models of EI, specifically the ability model of EI and the factors related to EI will be explained. Jung’s theory of personality types and the connection between personality and EI are described. Additionally, EI and counselor education, including the relationship between EI and counseling outcomes, are explored.

Intelligence

Since the 18th century, much of the literature and research on intelligence revolves around arguments of what constitutes intelligence and the mental processes that occur within intelligence. Mayer and Salovey (1997) argued that intelligence is not just one single ability but a collection of four mental operations that include: 1) motivation, 2) cognition, 3) consciousness (although less frequently), and 4) emotion. The first mental operation, motivation, is the individual’s response to physical needs and drives for hunger, thirst, social contact, and sexual desires in order to satisfy survival and reproductive needs (Mayer et al., 2000b). The second operation, cognition, enables individuals to learn, remember, and problem solve in their environment. Cognition is a continuous, deliberate, and flexible intellectual operation that is based on learning and retention. The third operation, consciousness, is a state of awareness that coordinates and unifies cerebral activities (Graziano, 2013; Kirkpatrick, 1908). Finally, the fourth operation, emotion, is a short-term feeling state with varying amounts of calmness and pleasantness or unpleasantness (Mayer & Salovey, 1997). The first three mental operations (i.e., motivation, cognition, and consciousness) interact with the fourth operation, emotion.
Defining Intelligence

The term *intelligence* was derived from the Latin word *intelligentia*, meaning “understanding, knowledge, and power of dissenting” (Harper, n.d., para. 1). Various philosophers defined intelligence differently, ranging from Pythagoras’s view of intelligence as “winds” to Descartes’s definition of intelligence as the capacity to decipher between truth and falsehoods (Salovey & Mayer, 1990). Later, Weschler (1944) defined intelligence as “the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with [the] environment” (p. 3). Weschler’s definition of intelligence is cited most often in the current literature (Salovey & Mayer, 1990). In 1971, Guilford and Hoepfner suggested that 120 different types of intelligence exist that are based on a calculation of the combinations of the four mental operations. In the past century, intelligence as a schema is a relatively new concept (Legg & Hutter, 2006). As recent as 2000, Sternberg stated that “almost as many definitions of intelligence [exist] as there were experts asked to define it” (p. 1).

More recently, Mayer et al. (1999) used three criteria for defining intelligence: a) conceptual, b) correlational, and c) developmental. The first criterion, conceptual, requires that intelligence reflect a high level of abstract reasoning that is operationalized as a set of abilities (Mayer et al., 1999; Sternberg, 1997). Characteristics of the mental abilities that make up abstract reasoning are the perception of similarities and differences among entities, recognition of smaller parts with coinciding relationships to larger objects, and effective reasoning within and across domains (Mayer et al., 2001). The second criterion, correlational, is empirically described as intellectual abilities that are intercorrelated and related to pre-existing abilities while maintaining a unique variance (Carroll, 1993; Mayer et al., 1999; Neisser et al., 1996). According to Mayer et al. (1999), the partial or complete independence of one type of
intelligence from other types of intelligence must be documented. The third criterion, developmental, requires that intelligence evolves with experience and age (Brown, 1997; Fancher, 1985; Mayer et al., 1999).

Types of Intelligence

Historically, intelligence was grouped into two types: 1) verbal or propositional and 2) perceptual or organizational (Kaufman, 2000). Verbal or propositional intelligence encompasses vocabulary, verbal fluency, logical thinking, and perception of similarities (Mayer & Salovey, 1997). Perceptual or organizational intelligence is the ability to construct objects and identify and execute patterns and designs. These two types of intelligence (i.e., verbal or propositional, perceptual or organizational) are measured by the scales included in Weschler’s IQ test (Salovey & Mayer, 1990). Another type of intelligence, traditional intelligence, is divided into several categories, such as cold and hot that is based on the subject matter involved. The category of cold intelligence involves reasoning with relatively impersonal information such as math, verbal-propositional, and visual-spatial abilities that do not involve the ego or self-involvement (Abelson, 1963; Mayer et al., 2016; Mayer & Mitchell, 1998; Zajonc, 1980). Hot intelligence involves more personal issues that are related to issues, such as social acceptance, emotional well-being, and identity coherence (Mayer et al., 2001).

Several pioneers in the field of intelligence; such as Thorndike, Sternberg, and Gardner paved the path to a more specific understanding of intelligence. Thorndike (1920) distinguished between three types of intelligence as abstract (i.e., verbal), mechanical (i.e., visual/spatial), and social. He defined abstract intelligence as the ability to comprehend and communicate concepts such as words, ideas, symbols, numbers, mathematical formulas, legal, and scientific principles. He viewed mechanical intelligence as the ability to learn and master objects (e.g., operating
machinery, navigating a marine vessel) and social intelligence as “the ability to understand men and women, boys and girls, to act wisely in human relations” (Thorndike, 1920, p. 228). Social intelligence was proposed as a unifying construct to understanding personality by describing people’s skills when relating to others (Cantor & Kihlstrom, 1987; Mayer & Salovey, 1997). However, social intelligence was criticized as being manipulative in nature (Mayer & Salovey, 1990; Weinstein, 1984). According to Cronbach (1960), social intelligence could not be distinguished from verbal intelligence, thus violating the criteria for defining an intelligence. Social intelligence remains undefined, despite 50 years of recurrent investigation.

Researchers (e.g., Gardner, Guilford, Sternberg, Thorndike) have continued to pursue a broad type of social intelligence by aiming to define a comprehensive set of mental capacities in their interpretations (Mayer et al., 1999). For example, from the criticism of social intelligence, according to Salovey and Mayer (1990), Sternberg created his model of successful intelligence in which he attempted to operationalize social intelligence. He asserted that more attention needed to be directed to creative and practical aspects of successful intelligence (Lopes & Salovey, 2004). Sternberg’s theory of successful intelligence has three broad domains of intellectual abilities: a) analytical (e.g., logical abstract and critical thinking), b) creative (e.g., original solutions to satisfy adaptability), and c) practical (e.g., common sense; Lopes & Salovey, 2004).

In the vein of social intelligence, according to Mayer and Salovey (1997), other models of intelligence were proposed, like Gardner’s “theory of multiple intelligences” (p. 33). His model includes the facets of verbal-linguistic, logical-mathematical, visual-spatial, bodily-kinesthetic, musical-rhythmical, interpersonal, and intrapersonal. According to Salovey and Mayer (1990), Gardner conceptualized his view of social intelligence as interpersonal and intrapersonal intelligence. Gardner (1983/1993) believed that
the core capacity at work here is access to one’s own feeling life— one’s range of affects or emotions: the capacity instantly to effect discrimination among these feelings and, eventually, to label them, to enmesh them into symbolic codes, to draw upon them as a means of understanding and guiding one’s behavior. In its most primitive form, the intrapersonal intelligence amounts to little more than the capacity to distinguish a feeling of pleasure from one of pain... at its most advanced level, intrapersonal knowledge allows one to detect and to symbolize complex and highly differentiated sets of feelings... to attain a deep knowledge of... feeling life (p. 239).

Of the many types of intelligence, Salovey and Mayer (1990) believed that Gardner’s interpersonal and intrapersonal intelligence most closely resembles the theoretical conceptualization of EI. Van Rooy et al. (2005) suggested that EI is a jingle fallacy, meaning two constructs, EI and personality, which are the same. However, EI was thrust into the national spotlight as a new type of intelligence in a Time Magazine article with the headline, “It’s not your IQ. It’s not even a number. But Emotional Intelligence may be the best predictor of success in life, redefining what it means to be smart” (Gibbs, 1995, p. 1).

**Emotional Intelligence**

A more formal definition of EI was provided by Mayer et al. (2016) as the ability to accurately *perceive, integrate, understand*, and *manage* emotions through the intersection of two mental abilities of emotion and cognition. The evaluation of EI is determined by the type of assessment used (Mayer et al., 1999). The authors used the following criteria for EI to be considered a traditional intelligence: a) capable of being operationalized as a set of abilities, b) correlates to a pre-existing intelligence while maintaining a unique variance, and c) develops with experience and age.
Associated with EI is the term *emotional competence*, which is defined as the “demonstration of self-efficacy in emotion-eliciting social transactions” (Bar-On & Parker, 2000, p. 68). Emotional competence describes how individuals “… respond emotionally, yet simultaneously and strategically apply their knowledge about emotions and their emotional expressiveness to relationships with others, such that they negotiate their way through interpersonal exchanges and regulate their emotional experience toward desired outcomes of goals” (Bar-On & Parker, 2000, p. 68). Also, emotional competence is fluid and can be expressed in moments, does not describe a constant state, and is not a personal characteristic, but rather an individual’s ability to complete a transaction. Advanced emotional competence is associated with an individual’s morality (i.e., integrity and wisdom).

Also, related inversely to EI is alexithymia, which is derived from the Greek word meaning *no words* or *feelings*. In the early 1950s, psychologists described the difficulty in treating patients suffering from a lack of emotional awareness and the resulting behaviors as well as patients’ decision-making skills based on externalized motives, such as rules and regulations (Stys & Brown, 2004). Alexithymia is characterized as “a) difficulty in identifying feelings and distinguishing between feelings and the bodily sensations of emotional arousal, b) difficulty describing feelings to other people, c) constricted imaginal processes evidenced by a lack of fantasy, and d) a stimulus-bound and externally oriented cognitive style which relies on external cues and signals rather than internal indicators” (Taylor & Bagby, 2000, p. 41-42).

**Models of Emotional Intelligence**

Multiple models have been used to explain EI (Mayer et al., 2000b). Three main models of EI are used in research and described in the literature: a) mixed (Bar-On, 1997; Goleman,
1995), b) trait (Petrides & Furnham, 2000), and c) ability (Salovey & Mayer, 1990). Each model portrays a different conceptualization of EI although similar tenets are present in each model.

**Mixed Model of Emotional Intelligence**

In the mixed model, Goleman (1995) defined EI as the ability to have self-control, zeal, persistence, and motivation. In one word, he equated EI to the character of an individual. Bar-On (1997) also defined EI in terms of the mixed model as “an array of noncognitive capabilities, competencies, and skills that influence one’s ability to succeed in coping with environmental demands and pressures” (p. 14). When using the mixed model, EI is measured by the Emotional Quotient Inventory (EQ-i), a 133-item self-report inventory that assesses five areas: 1) intrapersonal, 2) interpersonal, 3) adaptable, 4) stress management, and 5) general mood. Traits described in the mixed model of EI are similar to the traits described in the Big Personality Factor Model that include neuroticism, extraversion, openness, agreeableness, and conscientiousness (Myers, 1998; Stys & Brown, 2004).

Critics of the mixed model of EI questioned the fidelity of the model because self-report EI scores are likely to be a combination of well-known constructs including neuroticism, extraversion, and possibly conscientiousness (Fox & Spector, 2000; MacCann et al., 2003; Matthews et al., 2002; Zeidner et al., 2004). Mayer et al. (2000b) criticized the mixed model of EI because dozens of concepts overlap due to the scope of the EI definition, such as personal and social intelligence, as well as Jung’s Feeling function. Additionally, MacCann et al. (2003) criticized the mixed model of EI because of the repackaged version of a personality theory based on the empirical and conceptual research conducted on EI.
**Trait Model of Emotional Intelligence**

Petrides and Furnham (2000) described the trait model of EI as a model that focuses on “cross-situational consistencies in behavior (manifest in specific traits or behaviors such as empathy, assertiveness, optimism) as opposed to information processing EI, which concerns abilities (e.g., able to identify and label emotions)” (p. 314). Similar to the mixed model of EI, the trait model also incorporates elements of social and personal intelligence (Petrides & Furnham, 2003). In the trait model, EI is measured using Schutte et al.’s (2001) Self-Report Emotional Intelligence Test (SREIT), a 33-item self-report test. McCarley (2014) reported that the trait model of EI does not account for an individual’s level of reasoning, but instead focuses on the internal and external presentations of social awareness and adaptability. Landy (2005) and Roberts et al. (2010) criticized the trait model of EI for including too many variables and factors that overlap rendering the construct of EI invalid. Additionally, Roberts et al. (2010) wrote that the trait model of EI is significantly less supported by research than the ability model of EI.

**Ability Model of Emotional Intelligence**

In the ability model, Salovey and Mayer (1990) introduced the term EI by originally explaining it as "the subset of social intelligence that involves the ability to monitor one's own and others’ feelings and emotions to discriminate among them and to use these feelings to guide one's thinking and actions" (p. 190). The mixed model of EI is recommended and used extensively and is the most empirically supported by research (Roberts et al., 2010). EI is viewed as a distinct, unique construct within the ability model (Carrothers et al., 2000; Ciarrochi et al., 2000; Feist & Barron, 1996; Mayer et al., 1999; Pau & Croucher; 2003; Pau et al., 2004; Thi Lam, & Kirby, 2002). The ability model of EI has evolved and is currently defined as “the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate
feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotion to promote emotional and intellectual growth” (Mayer & Salovey, 1997, p. 35). Four hierarchical branches of EI (i.e., emotional perception, emotional integration, emotional understanding, and emotional management) are arranged from a most basic to a more integrated psychological process by building on one another.

**Emotional Perception.** Branch One of the ability model of EI involves the emotional perception, appraisal, and expression of emotions (Mayer & Salovey, 1997). More specifically, this branch includes the ability to identify emotions in an individual’s physical and psychological states and the ability to identify emotions in other people through their facial expressions, vocal cues, language, and behaviors. Emotional perception incorporates the ability to decipher between the degrees of accuracy and honesty of feelings; view emotions as they stand in context of a culture; and perceive emotional content in an environment, music, and visual arts. Branch One also refers to the ability to express emotions accurately and express the needs related to emotions (Mayer & Salovey, 1997; Mayer et al., 2016), as well as perceive emotions from indirect communications, rich with emotion-related content (Hill, 2014). Emotional perception is a highly valuable social skill in which an individual is able to appreciate subtle social cues (Briody, 2005).

**Emotional Integration.** Branch Two of the ability model of EI references the emotional facilitation of thought and is also referred to as emotional integration. The second branch refers to the ability to assess the significance of feelings, generate emotions to facilitate judgment and memory, maximize understanding of feelings by incorporating the entirety of a context, and creatively and effectively problem solve through awareness of an emotional state (Mayer & Salovey, 1997). Emotional integration also refers to the ability to generate emotions for the
purpose of relating to experiences of other people (Mayer et al., 2016). Emotional integration contributes to an individual’s cognitive process in deciding the areas in which it is essential to concentrate (Briody, 2005).

**Emotional Understanding.** The first two branches of the ability model of EI support the third branch, emotional understanding. In Branch Three, emotional knowledge is used to understand and analyze emotions by incorporating the ability to recognize relationships that are connected to various emotions; identify the antecedents, meanings, and implications of emotions; comprehend complex feelings, including blended and/or conflicting emotional states; and appreciate transitions among emotions (Mayer & Salovey, 1997). Also included in Branch Three is the ability to recognize cultural differences when evaluating emotions (Mayer et al., 2016) as well as the ability to relate to others and understand self (Briody, 2005). Emotional appraisal and emotional forecasting were later added to the third branch (Mayer et al., 2016).

**Emotional Management.** Branch Four of the ability model of EI includes emotional management, the highest and most difficult to master of the four branches (Barbash, 2015). This branch involves the emotional regulation and reflection needed to promote emotional and intellectual growth by connecting the cognitive system to the general personality. Emotional understanding supersedes the cognitive piece, due to the emphasis on balancing factors such as motivations, emotions, and cognitions (Mayer, 2001; Mayer et al., 2001). Specifically, Branch Four incorporates the ability of an individual to be open to both positive and negative feelings; regulate and reflect on emotions; be present, linger in, or detach from a given emotional state; manage personal emotions; as well as cope with emotions of others in order to produce a desired outcome (Mayer & Salovey, 1997; Mayer et al., 2016).
Assessment of Emotional Intelligence. In the ability model, EI is assessed using the MSCEIT, a convergent test that measures how well individuals perform tasks and solve emotional problems by assessing the four branches of EI (Mayer et al., 2003). Instead of a convergent test like the MSCEIT in the ability model, most research with other models of EI use self-report measures to obtain an individual’s perceived EI (Mayer et al., 1999). MacCann et al. (2003) wrote that performance-based tests for EI appear to generate more accurate results than self-report tests. In two research studies that assessed EI with college students performing a task in comparison to self-report of EI, minimal correlations were found (i.e., $r = .20$; Mayer et al., 1999; $r = .20 - .25$, Paulhus et al., 1998).

Several studies explored the efficacy of EI and the MSCEIT (Mayer et al., 2003: McCarley, 2014). Petrides and Furnham (2000) took issue with the scoring of the MSCEIT because tests of EI cannot be objectively scored due to the lack of objective and specific criteria that constitutes a correct answer, unlike standard cognitive ability instruments. When correctness as agreement is used to score tests, reliability can be compromised in relation to the MSCEIT (MacCann et al., 2003). “Consensually scored tests have very high levels of kurtosis and negative skew, and thus statistical analysis assuming multivariate normality cannot be validly used” (MacCann et al., 2003, p. 260). Additionally, MacCann et al. criticized the Branch One questions of the MSCEIT that focus on visual expression that effectively ignores domains of language, behavior, and sound.

Although much research exists on EI, some researchers question if EI is a distinct concept that contributes something new to social science research (Eysenck, 1998; Pluta, 2005; Van Rooy et al., 2005). Leading pioneers of other models of EI do not view EI as an ability or intelligence, thereby disputing the ideas based in the ability model of EI (Bar-On & Parker,
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Hein (2003) proposed that EI closely resembles social intelligence. Pfeiffer (2001) questioned if EI was a legitimate form of intelligence since EI can be increased and differs from abilities. Mixed model EI theorists believe that EI is a set of skills that are derived from learning and development, including exposure to opportunities and environments laden with emotion-related processes (Bar-On & Parker, 2000; Saarni, 1999). Their beliefs assume that EI is more teachable and less inherent than the ability model of EI suggests (Bar-On & Parker, 2000). As previously cited, Mayer et al. (1999) stated in their work that the ability model of EI meets the standards of a traditional intelligence and it can be operationalized as an array of abilities. Also, EI’s independence as a unique intelligence was established. Finally, EI was shown to be improve from early adolescence to adulthood.

Factors That Impact Emotional Intelligence

Since the inception of EI in 1990, the construct and meaning of EI has evolved throughout research publications, assessments, education, as well as consultations (Matthews et al., 2002; Matthews et al., 2004). Seven factors were found in the research that can impact individuals’ level of EI: 1) characteristics and behaviors, 2) gender, 3) development, 4) education, 5) culture, 6) work, and 7) personality.

Characteristic and Behavior Factors

Several research studies were conducted on EI and its relationship to the first factor, personal characteristics and behaviors of individuals. Correlations were found between individuals with high levels of EI and positive social relationships in college students ($r = .27, p < .05$; Lopes et al., 2003); greater self-reported confidence, less negative interpersonal behaviors, and psychological well-being ($r = .28, p < .001$; Lopes et al., 2004; $r = .28, p < .001$; Brackett & Mayer, 2003); improved perception of others through empathy, social competence, and
pleasant demeanor \( (r = .31, p < .0001; \text{Brackett et al., 2006}; r = .28, p < .001; r = .62, p < .001; \text{Lopes et al., 2004, 2005}) \); enhanced work performance and success in business managers \( (r = .35, p < .001; \text{Cote & Miners, 2006}; r = .17, p < .05; \text{Rubin et al., 2005}) \); lower ratings of anxiety \( (r = .06, p < .001; \text{Bastain et al., 2005}) \); greater life satisfaction \( (r = .22, p < .001; \text{Brackett et al., 2006}; r = .04, p < .001; \text{Bastain et al., 2005}) \); and decreased unhealthy behaviors, such as deviant behavior and drinking alcohol \( (r = -.27, p < .05; \text{Brackett et al., 2003}; r = .19, p < .01; \text{Engelberg & Sjoberg, 2000}) \). Individuals’ higher levels of EI correlated with positive outcomes; such as prosocial behavior, parental warmth, and healthy peer and family relationships \( (r = .17, p < .05; \text{Brackett et al., 2004}; r = .23, p < .01; \text{Mayer et al., 1999}) \). In Hampel’s (2002) research with 76 college student couples, EI was found to be significantly linked to trust (as measured by the Trust Scale), specifically with predictability \( (r = .22, p < .05) \) and faith \( (r = .26, p < .05) \).

**Gender Factors**

Gender differences have been observed in research on EI. For example, women’s EI scores on an earlier version of the MSCEIT tended to be higher than men’s scores \( (\text{Mayer & Geher, 1996}) \). In college students, women tended to score higher on EI than men \( (t(328) = -5.48, p < .0001; \text{Brackett et al., 2003}; t(144) = 3.95, p < .05; \text{Hampel, 2002}; t(495) = 3.68, p < .0001; \text{Mayer et al., 1999}) \). Todres et al. (2010) also found women scored higher than men on the MSCEIT \( (M = 102.6, 97.5, p < .05) \). When using tests of nonverbal perception that included emotion, such as the Profile of Nonverbal Sensitivity (PONS), Rosenthal et al. (1979) found women to be slightly superior to men in emotional perception. Schutte et al. (2001) found that women scored higher than men on the Schutte Self-Report Emotional Intelligence Test (SREIT). In contrast to results with the MSCEIT and SREIT, no gender differences were found on both EI total scores or in the five scale scores on the EQ-i, a self-report instrument \( (\text{Dawda & Hart, 2000}; \text{Brackett et al., 2006}) \).
Livingstone & Day, 2005). Mandell and Pherwani (2003) discovered that women scored higher on the EQ-i in both professional and personal settings. Hall (1978, 1984) found that women excelled more than men in their ability to read unstated social information, including nonverbal cues to a person’s emotional state. Also, Hall and Halberstadt (1994) found that women in more powerful positions displayed greater emotional accuracy than women in less powerful positions.

Additional research on gender differences in EI have been suggested to be linked to gender specific child-parent interactions (Brackett et al., 2003). Mothers’ capacity for expressing greater emotionality with their daughters may have explained women’s higher scores of EI. Mothers revealed a wider range of emotionality and spoke more frequently to their daughters in comparison to being more reserved and responding with less expression to their sons (Brody, 1985). Other research indicated that areas of the brain related to emotional processing may be larger in women than men, which could explain the gender differences (Brackett et al., 2003; Gur et al., 2002).

**Development Factors**

Another factor that impacts individuals’ level of EI is their developmental experiences. According to Mayer and Salovey (1997), emotional knowledge is fluid, beginning in childhood and developing throughout life, arming individuals with the ability to increase their understanding and meaning of emotions. At birth, organized emotional behavior exists, whereas the capacity for mental representation of emotions (i.e., thinking about feelings, experiences, or concepts) does not develop until individuals are 3 years old (Bar-On & Parker, 2000; Cowan, 1978). Rieck and Callahan (2013) agreed that EI is an innate personal attribute that can be increased by an individual’s experiences and personal growth. From an early age, infants recognize and respond to emotional facial expressions (Mayer & Salovey, 1997). As children
age, their ability to accurately identify their own physical sensations and social situations increase. Children’s emotional growth is stimulated by witnessing the emotional responses of caregivers and others in their environment (Bar-On & Parker, 2000; Stern, 1985).

Mayer and Salovey (1995) identified six predictive factors of higher levels of EI that individuals should have: a) emotionally sensitive parents in a biosocial adaptive household, b) non-defensiveness interactions, c) effectiveness in reframing of emotions, d) positive, emotional role models, e) abilities to process and communicate emotions, and f) knowledge in a specific emotional area such as aesthetics, morals, ethics, spirituality, leadership, or social problem-solving. Children who are raised in a biosocial atmosphere in which their parents are the first emotional role models are impacted in their development (Mayer & Salovey, 1997). Parental interaction is key to the development of children’s emotional skills by helping children to identify and accurately label their feelings, acknowledge and respect their emotions, and introduce them to social situations. Research on development of EI indicated that EI increased with age ($r = .13, p < .05$; Bhullar et al., 2012; $F(1, 709) = 22.3, p < .001$; Mayer et al., 1999). In Todres et al.’s (2010) research with 263 medical students under the age of 25, students scored significantly lower on the MSCEIT ($M = 99.6$) than students over the age of 25 ($M = 105.4, p < .05$).

**Educational Factors**

Educational training, a fifth factor that can have an effect on individuals’ level of EI. Education can improve an individual’s emotional knowledge (Brackett et al., 2003; Dulewicz & Higgs, 2000; Easton et al., 2008; Jaeger, 2003; Langley, 2000; Martinez-Pons, 2000; Mayer et al., 1999; Nelis et al., 2009; Satterfield & Hughes, 2007; Slaski & Cartwright, 2003; Ulutas & Omeroglu, 2007; Watkin, 2000). In teaching EI, Martin et al. (2004) cited Johnson and Indivik
who stated that EI could be increased by teaching someone the following tasks: a) validate emotions of others, b) desire for change, c) develop emotional control, d) use self-reflection, e) practice active listening, and f) practice empathy. According to Easton et al. (2008), if EI can be increased by implementing these tasks into education, either formally or informally, they could play a role in the development of EI. Additionally, Nelis et al. (2009) found that EI abilities could be enhanced through using a series of group training sessions that include discussions, lectures, role-plays, and homework, which are focused on identifying, expressing, using, understanding, and managing emotions.

In Goldenberg et al.’s (2006) research, high levels of EI in adults correlated weakly with higher levels of education ($r = .19, p < .01$). Other researchers (Grehan et al., 2011) found that strategic EI correlated with graduate grade point average in psychology graduate students ($r = .451, p < .01$). In a research study with 158 general management graduate students, Jaeger (2003) observed that 83.9% of the students’ EI increased with EI instruction throughout a semester. Additionally, Todres et al. (2010) discovered that 263 medical students in their final year of training scored significantly higher in the fourth branch, emotional management, of the ability model of EI ($M = 102.5, p < .05$). With retail store managers, the EI of the group that received educational instruction about EI increased more than with the control group who did not receive EI educational interventions ($t(52) = 5.20, p = .000$, Slaski & Cartwright, 2003). In a research study with six-year-old children who received a 12 week training on EI, Ulutas and Omeroglu (2007) found that the experimental group who received the training increased their EI scores significantly more than the control group who did not receive EI training ($F(2, 357) = 205.19, p < .001$).
Mestre et al. (2006) found that Spanish high school male and female students’ emotional understanding and emotional management correlated moderately and positively, respectively, with achievement ($r = .47, .40, p < .01$). And, with 373 Spanish undergraduate students, high level of self-perceived EI was linked to less academic burnout (Duran et al., 2006). Rode et al. (2007) found an indirect weak relationship between undergraduate students’ EI and academic performance ($r = .16, p < .01$), group behavior effectiveness ($r = .17, p < .01$), and public speaking ($r = .15, p < .01$). Jaeger (2003) found that general management graduate students’ EI was significantly and weakly related to their academic performance ($r = .215, p = .05$). Additionally, 464 Ontario principals’ and vice-principal’s EI were weakly linked to effective staff-rated leadership ($r = .17, p < .001$; Stone et al., 2005). Also, psychology doctoral students ($M = 104.56$) were more emotionally intelligent than medical students ($M = 101.2$), school psychology graduate students ($M = 96.85$), and business undergraduate students ($M = 92.93$; Barbash, 2015; Grehan et al., 2011; Rode et al., 2007; Todres et al., 2010; respectively).

**Culture Factors**

Culture is a fifth factor that impacts EI. Facial expressions, which convey emotions, are considered to be hard-wired, supporting the concept that recognition of facial expressions is universal, spanning across cultures (Izard, 1994; Jack et al., 2012). The universality of facial expressions of emotion was first suggested by Darwin (1872, 1965) and then confirmed by Tomkins and McCarter (1964) that facial expressions were associated with specific emotional states. Several studies, referred to today as the universality studies (e.g., Ekman, 1972, 1973; Ekman & Friesen, 1971; Ekman et al., 1969; Izard, 1971) connected culture with facial recognition. According to Briody (2005), individuals across cultures recognize six basic emotions (i.e., anger, disgust, fear, happiness, sadness, and surprise) that support the theory of
universality among these six emotions. Although basic emotions such as fear and anger are physiologically based and expressed similarly within and across cultures, secondary emotions (e.g., pride, guilt, shame) are developed through a sociocultural environment based on age and gender (McConatha et al., 1994).

Most researchers agreed that emotional communication is partially universal and somewhat specific to an individual’s culture (Yrizarry et al., 2001). Individuals from certain cultures exceed others in their ability to recognize the expressions of others (Matsumoto, 1992). For example, Matsumoto suggested that differences in recognition of emotions were a result of cultural differences from socially established rules concerning how emotions can be expressed, identified, or experienced. Roseman et al. (1995) found that if two different cultures appraised a situation similarly (i.e., positively or negatively), their emotional responses were similar. Conversely, if two cultures interpreted a situation differently, their emotional responses were different. For example, in Ekman et al.’s (1987) research, 95% of American participants associated the feeling of happiness with a smile, whereas only 69% of Sumatran participants associated happiness with a smile. Mayer et al. (2001) stated that in Western culture and education, a higher level of systemization of cognitive information was found in comparison to emotional information.

The nature of a culture, collectivistic or individualistic may also play a role in how emotions are expressed and understood (Mesquita, 2001). In a research study on EI with collectivistic and individualistic cultures, Bhullar et al. (2012) found that higher EI was found more in collectivistic cultures ($r = .58, p < .001$) than in individualistic cultures ($r = .35, p < .001$). Martines et al. (2006) assessed Americans’ and Mexicans’ ($n = 519$) EI with the Trait Meta-Mood Scale (TMMS; Salovey, et al., 1995), a self-report measure of EI that is comprised
by three scales: Attention, Clarity, and Repair. Mexicans scored lower on the Attention ($M = 2.56$) and Clarity ($M = 3.11$) scale than Latino Americans ($M = 3.70, M = 3.63$), whereas White participants scored higher on the Attention scale ($M = 3.98$) than Latino Americans ($M = 3.70$). Martines et al. (2006) suggested that these findings may be explained by the individualistic culture of the United States, which places more importance on individual outcomes, both in EI and personality. In Van Rooy et al.’s (2005) research with 275 undergraduate psychology students, Black students ($M = 129.56$) scored one-third of a standard deviation above White students ($M = 124.65$) and Hispanic students ($M = 132.13$) scored a half-standard deviation above White students on a self-report measure of trait EI (Emotional Intelligence Scale, EIS, Schutte et al., 1998). Researchers suggested Hispanics may be more emotionally intelligent due to their collectivistic culture, where emotions are taught and modeled as a tool for processing and situational interpretation (Van Rooy et al., 2004).

In a mixed model research study, Briody (2005) found no significant differences in EI between 94 Western and international undergraduate students’ EI. Culture did not emerge as a significant predictor of EI, but the small population and the use of a self-report measure of EI were limitations in his research. Barbash (2015) stated that emotional perception (i.e., Branch One) can be impacted by facial recognition. In Chen’s (2014) research on EI and facial recognition with undergraduate students, their high EI was found to be weakly correlated with their accuracy and sensitivity of facial recognition ($r = .39, .35, p < .05$).

Group differences in race have been found in various studies. In Todres et al. (2010)’s research, 5.4% of variance was explained by ethnicity of Caucasian medical students ($M = 103.3$) in comparison to Asian or Asian British ($M = 95.15$). In Whitman et al.’s (2014) research with 334 firefighter applicants’ EI, White applicants ($M = 6.41$) scored higher than Black
applicants ($M = 6.14$) on EI, as measured by the self-report, 16-item Wong and Law Emotional Intelligence Scale (WLEIS; Wong & Law, 2002). However, in Gignac and Gorgens-Ekermans’s (2010) research with 622 South African professionals, Black professionals ($M = 286.29$) scored higher than White professionals ($M = 284.35$) on the Genos EI, a self-report EI assessment. EI performance-based ability measures, like the MSCEIT, have shown the largest group differences, which favor White participants (Joseph & Newman, 2010). Because the MSCEIT is a performance-based ability measure of EI, it is possible that the MSCEIT reflects a trend that has been documented on cognitive ability assessments. The average of Black participants’ scores on cognitive ability measures are .72 standard deviations below the average scores of White participants (Roth et al., 2001). Also, White participants have been found to have more positive perceptions of cognitive ability assessments (Chan et al., 1997). Nisbett et al. (2012) stated that group differences in IQ can be attributed to environmental disadvantages. Joseph and Newman (2010) noted that because a lack of research exists on race and EI, “Race results should be interpreted with caution and should serve as a call for future EI researchers to report race differences in their measures” (p. 68).

**Work Factors**

EI was studied in its relationship to the sixth factor, work. In the work environment, EI was linked to overall workplace performance (Brackett et al., 2011). For example, corporate team’ managers with higher collective EI received higher performance ratings with customer service (Rice, 1999). With managers at the Johnson & Johnson Consumer and Personal Care Group, higher levels of emotional competence were linked to excellent work performance (Cavallo & Brienza, 2001). Lopes et al. (2006) found that employees with higher levels of EI had moderately higher employee rankings in their companies ($r = .43, p < .01$) and benefitted more
from merit increases \((r = .36, p < .05)\). Employees’ EI was also moderately correlated to peer-rated mood \((r = .43, p < .05)\), peer-rated negative social interactions \((r = -.41, p < .01)\), and supervisor-rated positive work environment \((r = .45, p < .01)\). EI was found to be moderately correlated to customer service managers \((r = .46, p < .01; \text{Feyerham} \& \text{Rice}, 2002)\).

**Personality Factors**

The final factor that impacts an individual’s EI is personality that is unique to an individual but can be similar compared to other individuals (Hergenham, 1994) and is considered to be key in the study of human behavior (Furnham, 1992). According to Saville and Holdsworth (1999), personality is an individual’s typical or preferred way of behaving, thinking, and feeling. Many personality theories have contributed to the extensive literature on personality types that are based on sets of assumptions and concepts regarding individual differences (Pervin, 1989). With the plethora of research and theories on personality, Jung’s interpretation of personality is one of the most used and cited personality theories in the literature (Hirsch, 1985).

**Jung’s Personality Type Theory**

Carl Jung viewed personality from a psychodynamic perspective. In the early 1900s, Jung extensively researched personality preferences and types by drawing on a spectrum of disciplines including psychology, philosophy, psychiatry, biology, physics, chemistry, literature, and mythology (Dicaprio, 1983; Moller, 1995; Pervin, 1989). Jung’s theory is viewed as a categorization of individuals based on their preferences for how they perceive information and make decisions (Higgs, 2001). Jung (1917) viewed personality as competing forces within an individual where the person is attempting to reach equilibrium. Behaviors are an expression of the opposing forces of feelings, desires, thoughts or other forces in one’s personality (Moller, 1995). According to Hergenham (1994), Jung was hopeful and optimistic in his view of human behavior.
nature, believing personality to be a product of an individual’s environment, as opposed to an inherited, psychological force.

According to Feist (1994), Jung’s theory has three components of the psyche: a) unconscious ego, b) personal unconscious, and c) collective unconscious. Jung proposed that the distant past of human existence informs an individual’s unconscious, rather than his or her personal experiences. Additionally, archetypes are viewed as powerful, emotional symbols that reside in the collective unconscious (Friedman & Schustack, 2009). Jung did not deny the complexity and uniqueness of individuals, but he argued that individuals could be categorized into distinct personality types (Dicaprio, 1983). An individual’s unconscious preferences and tendencies to perform certain tasks influence his or her personal choices and traits (Kennedy & Kennedy, 2004). Jung’s (1917) theory is based on three concepts of how individuals: a) approach life, b) become aware of the world, and c) reach conclusions about the world (Higgs, 2001). Based on the three concepts, Jung defined personality by three dichotomies of preference: a) general attitude, b) perception, and c) process. Each dichotomy has bipolar dimensions where each pole embodies a dominant preference that represents a dominant function; and by default, is an auxiliary, or secondary function. A fourth dichotomy, implementation, was later proposed in Jung’s theory (Myers, 1980).

**General Attitude.** The first dichotomy, general attitude, represents *Extraversion* (E) and *Introversion* (I), which signifies the source and direction of an individual’s expression of energy (Higgs, 2001). Individuals either find strength or comfort in the external or internal world (Kennedy & Kennedy, 2004). Extraverts are attracted more to people and things, whereas Introverts value ideas and information.
**Perception.** The second dichotomy, perception, represents *Sensing (S)* and *Intuition (N)* that is the method in which an individual perceives information by using the five senses (Kennedy & Kennedy, 2004). Individuals believe information from either the external or internal world that informs their sense of insight (Higgs, 2001). A Sensing person values facts and reality; in contrast to an Intuitive individual who prioritizes possibilities and potentials (Higgs, 2001). Jung viewed the perception dichotomy as irrational because it stems from the intensity of perception, not from reason and judgement. The function of perception is driven from the unconscious world, operating from assumed sensations and premises that are capable of taking various forms or outcomes.

**Process.** The third dichotomy, processing, represents *Thinking (T)* and *Feeling (F)*, which explore how an individual processes information in his or her decision making (Friedman & Schustack, 2009). Thinking individuals make decisions through logic; conversely Feeling individuals base their decisions on emotions (Higgs, 2001). Individuals who identify as Thinking place more importance on logic and truth (Friedman & Schustack, 2009), whereas individuals who more closely identify as Feeling prioritize their values and relationships (Kennedy & Kennedy, 2004). Jung (1921/1971) viewed the process dichotomy as rational because it consists of the rationale behind reasoning. The process dichotomy results in thoughts, feelings, and subsequent behaviors that exist within certain rules, principles, and norms.

**Implementation.** The fourth dichotomy, implementation represents *Judging (J)* and *Perceiving (P)*, which examines how an individual implements information (Myers, 1962). An individual who identifies more closely with the Judging function responds to external stimuli and prefers to have structured organization in his or her life plans. An individual who identifies more
closely with the Perceiving function is more inclined to improvise and explore alternatives (Kennedy & Kennedy, 2004).

Each dichotomy of the four dichotomies is represented by a letter; E/I, S/N, T/F, and J/P. The four dichotomies yield 16 combinations of personality types which include: ISTJ, ISFJ, INFJ, INTJ, ISTP, ISFP, INFP, INTP, ESTP, ESFP, ENFP, ENTP, ESTJ, ESFJ, ENJ, and ENTJ. Each personality type differs in values, needs, and interests as well as holds distinct ambitions, responds to specific rewards, and learns in an individualized way (Jung, 1969). The applicability of Jung’s theory was assessed with the development of The Myers-Briggs Type Indicator (MBTI) and various other assessment instruments. According to Baptista (2009), studies using the MBTI offer support for Jung’s theory of personality type. A second instrument, 16 Personality Factor Questionnaire, was developed by Cattell (1965) utilizing the Introversion and Extroversion traits.

**Development of Personality Types**

Jung’s theory assumes that individuals are capable of continuous and creative development of their personalities and are not stagnant because personality is receptive and influenced by the present (Higgs, 2001). Jung (1921, 1971) and Myers (1980) both suggested that an individual’s personality type begins biologically but can be influenced through one’s environment and culture. Myers and Myers (1980) found that in Western societies, men are socialized toward the Thinking function, whereas women are socialized toward the Feeling function. In Western culture, both genders are socialized toward Extroversion, Sensing, and Judging functions. As a result, the majority of men identify as ESTJ and the majority of women identify as ESFJ (Myers & Myers, 1980). The least common personality type in the United States is INFJ (Center for Applications of Psychological Type, 2003).
Jung’s theory assumes individuals are predisposed to have a preference with a given function (Spoto, 1989). Children are most interested in their preferred function and are motivated to practice their preferences, becoming more skilled and experienced in their given dichotomy (Myers, 1980). During children’s development of their personality type, they grow curious and develop their auxiliary types (Myers & McCaulley, 1985). During youth development, an individual’s personality type becomes more specialized, whereas the generalist period occurs during midlife. During adulthood, an individual’s less preferred third and fourth functions develop (Myers & McCaulley, 1985). For a personality type to be well-balanced, two conditions must be met. First, the dominant function must be well developed (Bayne, 1995b). Second, judging and perceiving functions must be equally developed, one characterized as dominant and the other characterized as auxiliary (Myers & McCaulley, 1985). Jung advocated for personal growth and asserted that it was important to develop all functions in a personality type (Vacha-Haase & Thompson, 2002).

However, Jung’s theory of personality type has been criticized for having a needlessly large variety of concepts that describe all of the functions of personalities. Moller (1995) said that although an individual’s specific behavior could be explained by one or more archetypes, Jung’s theory does not provide an explanation behind why a behavior can be explained by archetypes. Despite the frequency with which the term type is used, type implies a dissonance because the majority of human traits appear to be continuous (Moller, 1995). Thus, issues with operationalizing Jung’s theory exists (Feist, 1994).

**Personality and Emotional Intelligence**

According to current perspectives on personality in psychology, personality stands apart from EI and is a separate construct (Mayer et al., 2000b). Using the Myers-Briggs Type Indicator
with Introversion and Intuition types, recent research by Malik and Zamir (2014) demonstrated that individuals’ personality types were weakly and moderately positively correlated with their overall EI ($r = .378, p < .007$; $r = .412, p < .001$). In particular, Higgs (2001) found that Intuition (as measured by the MBTI) was significantly and weakly correlated with higher levels of EI (as measured by the Emotional Intelligence Questionnaire, EQI; $r = .195, p < .05$). Baptista (2009) found individuals who identified with Extroversion and Judging personality types had higher levels of EI ($F(6, 1121) = 107.96, p < .0001$; $F(6,1121) = 105.59, p < .0001$), than Introversion and Perceiving personality types ($F(6, 1121) = 95.049, p < .0001$; $F(6,1121) = 99.483, p < .0001$) as measured by Bar-On’s EI Quotient.

Using self-report EI assessment; Paulhus et al. (1995) suggested that the mixed model of EI seems to combine the positive poles of the five-factor model of personality, which may explain the model’s appeal. Research results with the mixed model EI instruments such as the EQ-i and SREIT shared significant variance with the five-factor model of personality, as measured by the NEO Personality Inventory-Revised (NEO-PI-R; EQ-i: Neuroticism, $r = -.57, p < .001$; Extraversion, $r = .37, p < .001$; Openness, $r = .16, p < .05$; Agreeableness, $r = .27, p < .001$; Conscientiousness, $r = .48, p < .00$; SREIT: Neuroticism, $r = -1.9, p < .01$; Extraversion, $r = .32, p < .001$; Openness, $r = .43, p < .001$; Agreeableness, $r = .09, p < .05$; Conscientiousness, $r = .25, p < .001$; Brackett & Mayer, 2003). Brackett and Mayer (2003) suggested that because the mixed model of EI has so much in common with personality variables, it “may have just been a case of reinventing the wheel” (p. 196). Using the MSCEIT to assess EI, Brackett and Mayer (2003) found no significant relationship between Extroversion and levels of EI ($r = .11, p > .05$). As measured by the MSCEIT, EI was only found to be significantly and weakly related to Openness and Agreeableness ($r = .25, .28, p < .001$).
Emotional Intelligence and Counselor Education

Because high levels of EI provide individuals with the ability to recognize, use, and understand emotions in order to manage their emotions and behaviors (Mayer & Salovey, 1997; Salovey & Mayer, 1990), EI can be a valued and important ability for counselors to possess (Easton et al., 2008). Training for counselor education students was described as “modifying existing personal characteristics, while simultaneously developing specific technical skills relevant to successful intervention outcomes” (Rieck & Callahan, 2013, p. 48). A graduate degree curriculum in counselor education includes the core characteristics and technical skills that counselors need to practice counseling (Martin et al., 2004). Knight (2009) deemed it necessary for counseling practitioners and researchers to examine the construct of EI in relation to counselor education. He proposed that “EI may provide a name, description, and method of measuring relevant personal characteristics that contribute to positive training outcomes amongst counselor trainees” (p. 3). Miville et al. (2006) suggested that counselor education programs teach their students to become more emotionally intelligent by teaching techniques and skills in how to differentiate their emotions from others’ emotions. If EI is a competency that can be acquired or developed through education and practice, it is possible that increased EI may enhance counselors’ awareness of EI (Easton et al., 2008). Also, the use of the ability model-based measure of EI “can identify … those who may be mismatched with a given career (e.g., counseling and psychotherapy) because they lack the understanding of feelings necessary to listen empathically and to behave sensitively” (Mayer et al., 2000b, p. 106).

Rieck and Callahan (2013) suggested that EI is an important counselor characteristic that can have valuable applications in graduate training programs (e.g., applicant screening, emotional/interpersonal competency and development). Many baseline counseling competencies
and skills, including interpersonal (e.g., active listening, empathy), cognitive (e.g., critical thinking), affective (e.g., affect tolerance and understanding), personality (e.g., extraversion, agreeableness, openness), expressive (e.g., effective communication of feelings), reflective (e.g., self-examination in relationships), as well as additional knowledge of graduate coursework (e.g., ethics, assessment, and diagnosis) are consistent with the branches of EI (Hatcher & Lassiter, 2007; Rieck & Callahan, 2013). Rieck and Callahan (2013) advocated for gatekeeping measures of counseling trainees with unacceptable levels of EI that the authors suggested is consistent with a lack of adequate baseline competencies and skills required in counseling; such as during practicum and internship.

Emotional Intelligence and Counseling Core Conditions

Core characteristics of counselors typically discussed in the literature include characteristics; such as empathy, unconditional positive regard, genuineness, congruence, respect, and concreteness as necessary for effective counseling to occur (Miars et al., 1997). Empathy is cited as one of the top five characteristics of effective mental health counselors (Pope & Kline, 1999). Kaplowitz et al. (2011) suggested that the tenets of EI overlap with at least four of the main skills cited in psychotherapy literature: empathy, reflective functioning, psychological mindedness, and affect regulation. Campbell et al. (1971) similarly posited that counselors’ accurate perceptions of emotions coincide with effective counseling.

Several research studies were conducted on the counseling core conditions and EI. Martin et al. (2004) found that counseling students and professional counselors have higher perceived EI, as measured by the Emotional Judgement Inventory (EJI) than individuals from a normative sample (Wilk’s Lambda = .835, $F(7, 132) = 3.714, p < .001; n² = .165$). Easton et al.’s (2008) suggested that EI is a core characteristic of counselors, due to Martin et al.’s (2004)
finding. Additionally, Miville et al. (2006) found that EI was moderately correlated with three dimensions of Davis’ multidimensional model of empathy \( (r = .30, p < .03) \). The self-report Trait Meta-Mood Scale (TMMS) measures attention to feelings, clarity of feelings, and mood repair. As a means of measuring EI, Salovey et al. (1995) found that attention and clarity were negatively related to negative transference in clients \( (r = -.30, -.32, p < .01) \), whereas positive transference was positively and weakly related to EI in clients’ attention and clarity \( (r = .38, .28, p < .01; \text{Markin}, 2005) \). EI was found to be significantly and weakly correlated with therapists’ performance and self-efficacy \( (r = .18, p < .05; \text{Andonian}, 2010; r = .537, p < .000; \text{Martin et al.}, 2004) \). Omoregbee et al. (2016) found that with graduate clinical psychology students, EI had a stronger relationship with clinical performance than with their cognitive ability \( (e.g., \text{GPA}; r = .72, p = .02) \). Grehan et al. (2011) found that high EI was linked to supervisors’ high ratings of student performance in internship. Also related to counseling, Barbash (2015) found that EI, as measured by the MSCEIT, was weakly correlated with supervised clinical experiences \( (r = .36, p < .001) \) and years of graduate study \( (r = .27, p < .01) \). Akerjordet and Severinsson (2007), Hurley (2008), and Rieck and Callahan (2013) concluded that EI is important to effectiveness and development of professional competence in professionals who work in mental health environments.

Miville et al. (2006) assumed that in order for counselors to appreciate clients’ narratives, counselors must be able to perceive both stated and unstated emotional cues from clients. In a research study by Rieck and Callahan (2013), clients reported experiencing moderate meaningful change when their psychology doctoral student therapists scored high in EI \( (r = .40, p < .01) \). Additionally, Markin (2005) suggested that in counseling EI can provide clients with a set of skills to achieve insight, a proven link to the relief of psychological symptoms in clients.
Using the ability model of EI, the counseling core characteristic of empathy was weakly correlated with Branch One of EI, emotional perception \( r = .20, p < .01 \); Branch Three, emotional understanding \( r = .25, p < .01 \); and Branch Four, emotional management \( r = .34, p < .01 \); Mayer & Salovey, 1999). Using the ability model of EI, Barbash (2015) found that 87 doctoral students’ average EI score was 113.05 and the averages on their branch scores were emotional perception, 105.78; emotional integration, 104.23; emotional understanding, 115.95; and emotional management, 108.64.

Barbash (2015) found that EI of psychology doctoral students typically improved each year of graduate school, with first year students scoring low \( M = 108.27 \), second year students scoring the lowest \( M = 106.65 \), and fifth year students scoring the highest in EI \( M = 121.82 \). Using the scoring system in the MSCEIT, all participants’ means were in the high average or competent level of EI. Barbash (2015) found that 18.9% of the variance of EI was explained by total years of graduate study and total hours of supervised clinical experience \( R^2 = .189, F(2, 84) = 9.77, p < .001 \). He also found that psychology doctoral students’ years of graduate study were significantly and weakly related to overall EI and Branch One of EI, emotional perception \( r = .26, .24, p < .01 \); years of graduate study and total hours of supervised clinical counseling experience were significantly and weakly related to the Branch Two of EI, emotional integration \( r = .25, p < .01; r = .33, p < .001 \); and total hours of clinical counseling experience significantly, but weakly, predicted Branch Three of EI, emotional understanding \( r = .28, p < .001 \). However, years of graduate study and total hours of clinical experience were not significantly related to Branch Four of EI, emotional management \( r = .13, .17, p > .05 \).

According to Kaplowitz et al. (2011), Branch Four of EI was the most consistently predictive of all four of the branches of EI in its impact on client-rated outcome, dropout rates, and client
assessment compliance. In their research, therapists with higher EI achieved better therapist-rated outcomes, had lower client dropout rates, and increased client compliance \((r = .20, .63, p < .001; r = -.59, p = .003)\). Several authors (e.g., Barbash, 2015; Easton et al., 2008; Jackson, 2002-2003) suggested that counselors utilize Branch Four, emotional \textit{management}, when dealing with countertransference that may arise with clients because emotional regulation contributes to the adequate responses to transference and countertransference. Barbash (2015), Hersoug et al. (2009), and Novotney (2013) stated that all four branches of EI are necessary to develop a strong therapeutic alliance enabling counselors to be competent, caring, flexible, interested, understanding, and responsive to their clients.

\textbf{Counselors’ Theoretical Orientation}

Theoretical orientation is a major factor that impacts how counselors practice counseling as well as the type of treatment they provide to clients (Arthur, 2000; Vasco et al., 1993). Counselors’ theoretical orientation is not a singular choice but rather a developmental process that includes theoretical revisions and realignments (Norcross & Prochaska, 1983). During graduate school, counseling students are advised to choose a well-researched and logical approach to selecting theories that are consistent with their values and personality (Capuzzi & Gross, 1995; Patterson, 1986; Prochaska & Norcross, 1994). When choosing a theory, students tend to gravitate toward an integration of human understanding based on their individual life and career experiences (Freeman et al., 2007).

Various influences that can impact counseling students’ choice of theory are content of coursework, assigned readings, and interpersonal variables (e.g., peers and supervisors; Bodkin et al., 1995; Hansen et al., 1986; Johnson et al., 1992; Liebling, 2001; Lovinger, 1992; Norcross & Prochaska, 1983; Shoben, 1962; Steiner, 1978). Additional influences that can impact
counseling students’ choice of theory include undergraduate and graduate courses, clinical training, professional development, as well as clients (Bitar et al., 2007). Murdock et al. (1998) found that philosophical variables, interpersonal control, and supervisors’ theory predicted counselors’ choice of theoretical orientation. Counselors who differ in their choice of theoretical orientation also differ in their epistemic beliefs, verbal responses, and therapeutic techniques (Worthington & Dillon, 2003).

**Theoretical Orientation and Personality**

Counselors’ personality is one of the most frequently discussed factors that impact their choice of theory (Bitar et al., 2007; Capuzzi & Gross, 1995; Corsini & Wedding, 1995; Prochaska & Norcross, 1994). Freeman et al. (2007) stated that personality assessments are commonly used in counselor education programs to assist students with their choice of theoretical orientation. Bayne (1995b) suggested that counselors’ self-awareness of their own personality type could alter their counseling approach to best suit their clients’ personality type, thus enhance counselors’ efficacy with clients and provide the best possible environment for client growth.

Three research studies using Jung’s personality types found that counselors who identified as Thinking and Judging types reported having a more active approach to therapy grounded in a theory such as cognitive behavioral, whereas Feeling and Perceiving types of counselors described utilizing a more passive or affective theory such as person-centered (Churchill & Bayne, 1998; Erickson, 1993; Robbins & Turley, 2016). Using Jung’s theory, Dodd and Bayne (2006) found that counselors’ theoretical approach was influenced by their personality types; 78% of Thinking type counselors considered themselves to be CBT \( n = 9 \); whereas 78% of Feeling type counselors chose an affective theory (i.e., Psychodynamic, Person-
Centered, and Psychosynthesis; n = 72). Similarly, Erickson (1993) found a significant
difference using a chi square analysis with 23 counselors. Of 23 counselors in Erickson’s (1993)
research, 5 out of 7 were Thinking type counselors who preferred cognitive theories and 12 out
16 were Feeling type counselors, who preferred affective theories (p < .05). In McBride and
Martin’s (1988) research with 64 counselor education master’s students, 17 Thinking type
students chose cognitive theories (i.e., Rational-Emotive Therapy, Reality Therapy, Adlerian
Therapy, and Behavioral Therapies); whereas 4 chose affective theories (i.e., Rogerian, Gestalt, and Existential). Of the Feeling type students, 24 chose affective theories; whereas, 19 students
chose cognitive theories (McBride & Martin, 1988). Using The Million Index of Personality
Styles (MIPS) assessment, Arthur (2000) found that Thinking type counselors who were from a
cognitive perspective scored higher than those from a psychoanalytical perspective (F(1, 239)=
45.127, p < .001). Additionally, Arthur (2000) found that Feeling type counselors who were from
a psychoanalytical perspective scored higher than those from a cognitive perspective (F(1, 239)=
16.509, p < .001). Similarly, Frederickson (1991) found that counselors who were Thinking type
were inclined to use a more directive theory.

Personality Feeling type of counselors described emphasizing the expression of feelings
and the therapeutic alliance more than Thinking and Judging types of counselors (Frederickson,
1991). Intuitive type counselors prioritized clients’ intellectual understanding more than Sensing
type of counselors. With a small sample of 84 psychology students, Varlami and Bayne (2007)
found that 60% of students who identified as Sensing and Judging personality types were more
likely to choose a cognitive behavioral theory; 38% of Intuitive, Feeling, and Judging types of
students were more likely to select a psychodynamic theory; and 68% of Intuitive, Feeling, and
Perceiving types of students were more likely to choose a person-centered theory.
In Robbins and Turley’s (2016) research, person-centered counselors were most likely to identify as Introvert, Intuitive, Feeling, or Judging personality types. Of the 86 counselors in their research, 58.8% of person-centered counselors identified as Introverts over Extraverts, 58.8% as Intuitive over Sensing, and 65.9% identified as the Feeling type, as opposed to the Thinking type. Of the person-centered counselors, 75.3% identified as Judging over the Perceiving type. Robbins and Turley (2016) explained that most participants identified as Introverts, which fit well with the tenets of person-centered theory that counselors must step into the client’s world, disregarding counselors’ own personal lives. Robbins and Turley (2016) theorized that counselors with a personality type of Introvert would be well-suited for working one-on-one with clients because Introverts prefer to be alone, feeling drained by too many people. As person-centered theory focuses on the client’s present experience, the Intuitive personality type is complementary to the person-centered theory because an Intuitive type focuses on the client’s immediate experience.

Also fitting with the Intuitive type and person-centered therapy is the counselor’s goal to examine the client’s bigger picture while looking at relationships and meanings that surpass sensory information (Francis, 2005; Keirsey, 1998; Robbins & Turley, 2016). Counselors who are a Feeling personality type aim for harmony and peace that is consistent with the therapeutic tenets of person-centered therapy, including unconditional positive regard, empathy, and congruence (Robbins & Turley, 2016). Counselors who are a Judging type prefer structure and routine, which is parallel to a counselor’s tendency to be punctual and structured when scheduling sessions with clients. In Churchill’s and Bayne’s (1998) research on 15 counselors’ personality types and their relationship with empathy as a tool in therapy, the researchers found
that counselors who are a Judging type \((n = 7)\) were more interested in treatment planning than perceiving types of counselors \((n = 8)\), who preferred to allow therapy to develop at its own pace.

**Summary**

Historically, intelligence has been studied by countless theorists and researchers. Throughout the extensive literature on intelligence that was described in chapter two, motivation, cognition, consciousness, and emotion have emerged as fundamental processes of mental operations. The four mental operations play a role in EI, with the ability model of EI being one of the major models used to describe and assess EI. The four branches of the ability model include emotional *perception, integration, understanding,* and *management*. Seven factors were described in chapter two that impact EI including an individual’s characteristics and behaviors, development, gender, education, culture, environment, and personality. The connection between EI and counseling as well as the relationship of counselors’ theoretical orientation and personality type to their EI were also described. A gap in the literature regarding the relationships between counselor education graduate students’ EI was established. The relationship between counselor education graduate students’ EI and personality type emerged as unclear, prompting the researcher to address this gap in the research.
Chapter III

Methodology

Chapter three includes the purpose of the study, research design, research questions, hypotheses, variables, participants, and procedures. Additionally, the instrumentation and psychometric properties of the instruments as well as the data analysis are provided.

Purpose of the Study

The purpose of the present research was to determine if there was a relationship between counselor education graduate students’ demographics, academic experience, level of EI, and personality type. The researcher sought to better understand academic experience, EI, and personality type of master’s and doctoral level counseling students who are enrolled in a CACREP counselor education graduate program in southern Louisiana and Texas.

Research Design

The research design was descriptive and correlational. A descriptive design is a quantitative study that analyzes demographics. A correlational design is a quantitative study that examines possible relationships between two or more variables (Leedy & Ormond, 2016). For the present research, a correlational design was used to examine the relationship between master’s and doctoral level counselor education students’ demographics, academic experience, level of EI, and personality type.

Research Questions

The present research study included the following three questions.

Research Question One

What are the descriptive statistics for demographics (i.e., gender, age, race, theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s
pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), level of emotional intelligence (i.e., MSCEIT), and personality type (i.e., JTT™) of counselor education graduate students?

**Research Question Two**

What is the strength of the relationships between counselor education graduate students’ gender, age, race, theoretical orientation, academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), level of emotional intelligence (i.e., MSCEIT), and personality type (i.e., JTT™) of counselor education graduate students?

**Research Question Three**

Do the demographics (i.e., gender, age, race, theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; number of coursework hours completed, and number of years of study completed in counselor education graduate study), and personality type (i.e., JTT™) predict counselor education graduate students’ level of emotional intelligence (i.e., MSCEIT)?

**Hypotheses**

The following hypotheses were derived from the three research questions.

**Hypothesis One**

The descriptive statistics for demographics (i.e., gender, age, race, theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s
pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), level of emotional intelligence (i.e., MSCEIT), and personality type (i.e., JTT™) of counselor education graduate students will be analyzed.

**Hypothesis Two**

There will be a significant relationship between counselor education students’ gender, age, race, theoretical orientation, academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), level of emotional intelligence (i.e., MSCEIT), and personality type (i.e., JTT™).

**Hypothesis Three**

The demographics (i.e., gender, age, race, theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), and personality type (i.e., JTT™) will predict counselor education graduate students’ level of emotional intelligence (i.e., MSCEIT).

**Variables**

The independent variables were the participants’ demographics (i.e., gender, race, and theoretical orientation), which are nominal data. The demographic of age is interval data. Participants’ academic experience, as measured by level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral are nominal data.
The number of coursework hours completed and number of years of graduate study completed are interval data.

The dependent variables were the participants’ level of EI and their personality type. Participants’ levels of EI were measured by the MSCEIT, which is interval data. The MSCEIT has 15 subscales (e.g., one total score, two area scores, four branch scores, and eight task scores; Mayer et al., 2003). Participants’ personality types were measured by the JTT™, which is nominal data. JTT™ scores produces 16 possible categories (i.e., ISTJ, ISFJ, INFJ, INTJ, ISTP, ISFP, INFP, INTP, ESTP, ESFP, ENFP, ENTP, ESTJ, ESFJ, ENFJ, and ENTJ).

**Participants**

As suggested by Terrell (2016), a convenience and purposive sampling procedure was used to recruit participants based on the defined inclusion criteria of a master’s or doctoral level student enrolled in one of six CACREP accredited counselor education graduate programs located in southern Louisiana and Texas (i.e., University of New Orleans, Xavier University of Louisiana, Southeastern Louisiana University, Louisiana State University and Health Science Center, Nicholls State University, and Lamar University). CACREP accredited counselor education programs were utilized to increase the generalizability of results to other CACREP accredited counselor education programs; however, the six universities are located in southern Louisiana and Texas, thus generalizability may not be possible for other areas of the United States. The intended sample size was a minimum of 129 participants, as determined by a G*Power calculation (Heinrich-Heine-Universität Düsseldorf, 2014).

**Procedures**

Approval for the research was obtained from Institutional Review Boards (IRB) at the University of New Orleans and as required from Institutional Review Boards at participating
universities. An informed consent form was given to participants that included an introduction to the researcher as a doctoral student studying counselor education at the University of New Orleans (see Appendix A). A brief description of the research and its topic, EI and personality type, as well as what is required for participation was included in the informed consent. Participants were informed that their participation was voluntary and that they may withdraw at any time. Participants were also informed that the results of the research may be published, but participants’ identifying information, such as names, would be kept confidential. Risks were disclosed, as were benefits, such as the ability for participants to obtain their EI and personality type scores. Participants were given a number to contact if they had any concerns related to the research. Participants were asked to sign the informed consent, indicating that they agreed to participate in the research.

**Data Collection**

Program coordinators of the six CACREP counselor education programs in southern Louisiana and Texas (i.e., University of New Orleans, Xavier University of Louisiana, Southeastern Louisiana University, Louisiana State University and Health Science Center, Nicholls State University, and Lamar University) were contacted via phone and email by the researcher to introduce the research and gain access to faculty and students (see Appendix B). The researcher conducted classroom presentations that introduced the study’s topic and solicited participation in master’s level classes, such as Theories, Techniques/Skills, Practicum, and Internship, as well as doctoral level supervision groups and doctoral classes. Presentations included information about EI and the MSCEIT as well as personality types and the JTT™ (see Appendix C). Following the presentations, interested students were asked to read and sign the IRB approved informed consent indicating their agreement to participate.
As part of the informed consent, participants were informed that the Demographic Survey would take approximately five minutes, the MSCEIT approximately 30 to 45 minutes, and JTT™ approximately 20 minutes. Participants were asked to indicate their email addresses on the informed consent in order to be emailed access to the MSCEIT. Participants were then asked to complete a paper copy of the Demographic Survey that was administered in person requiring participants to provide their gender age, race, chosen theoretical orientation, level of counselor education program, number of counselor education coursework hours completed, and number of years of counselor education study completed. As part of the Demographic Survey, participants were asked to indicate on the survey their resulting personality type obtained when they completed the JTT™ online. Participants were also asked to write their email addresses on the Demographic Survey. Following completion of the Demographic Survey, participants were asked to electronically complete the MSCEIT and JTT™ using iPads provided by the researcher. To take the MSCEIT, participants were emailed a login and an exclusive password chosen by the researcher. The password also served as each participant’s identifier. The MSCEIT is housed online at Multi-Health Systems Inc. (MHS Assessments, n.d.). Participants’ MSCEIT scores were sent to the test publisher, per a required dual-sharing agreement (see Appendix D). The JTT™ is a free online personality test that was emailed to participants and is housed at HumanMetrics Inc. (Discover Your Personality Type, n.d.). Participants’ completion of the research was encouraged with the opportunity to enter a raffle and a chance to win one of four $10.00 Starbucks Coffee Company’s gift cards. Included in the informed consent is the requirement that participants include their email addresses if they chose to be eligible for the gift card drawing.
Instrumentation

Three instruments were used in the present research: a) Demographic Survey, b) MSCEIT, and c) JTT™.

Demographic Survey

The Demographic Survey was used to gather personal characteristics of the participants (see Appendix E). Participants indicated their gender by selecting from three categories (i.e., female, male, transgender), race from eight categories (i.e., American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White/Caucasian, Biracial, Hispanic/Latino, or Other), and theoretical orientation from nine categories (i.e., psychoanalytic/nonanalytic, cognitive/behavioral, systems, person-centered, Gestalt, solution-focused, existential/humanistic, or Other). Participants indicated their level enrolled in a counselor education program (i.e., master’s pre-practicum, master’s practicum/internship, or doctoral), number of counselor education graduate coursework hours completed, number of years of counselor education graduate study completed, and their personality type that they obtained from completing JTT™. The researcher entered Demographic Survey data into SPSS Version 24.

MSCEIT

Access to the MSCEIT was purchased through MHS, a company that sells psychological assessments (MHS Assessments, n.d.). Matthews et al. (2002) stated that the method of measuring the construct of EI is as important as the EI model used by researchers. Self-report scales of EI that are used to measure other models of EI, such as the EQ-i and SREIT, were found to have low correlations with measured abilities of perceiving, using, understanding, and/or measuring emotions (Brackett et al., 2006). Unlike other self-report EI instruments, the
MSCEIT is a convergent and objective test that assesses participants’ ability to correctly answer test items that measure the construct of EI. Additionally, as a measure of EI, the MSCEIT was discriminable from other well-established instruments that measure the construct of personality (Brackett & Mayer, 2003). The MSCEIT is the preferred measure of the ability model of EI due to its acceptable validity (Barbash, 2015; Mayer et al., 2002; Spector, 2005; Stratton et al., 2008).

The MSCEIT, developed by Mayer et al. (2002), evolved from the Multifactor Emotional Intelligence Scale (MEIS) and Mayer-Salovey-Caruso Emotional Intelligence Test Research Version 1.1 (MSCEIT RV1.1), the latter of which assessed 12 ability measures related to four branches of EI: 1) perceiving and expressing emotions, 2) using emotions to facilitate thoughts and other cognitive activities, 3) understanding emotions, and 4) managing emotion in self or others. Concerns over length and removal of certain constructs in the MEIS led the researchers to create the MSCEIT, which takes less time to administer, approximately 30 to 45 minutes. Earlier instruments measuring constructs such as emotional creativity, social intelligence, and non-verbal perception were removed from the MEIS (e.g., Averill & Nunley, 1992; Kaufman & Kaufman, 2001; Mayer et al., 2003; O’Sullivan & Guilford, 1976; Rosenthal et al., 1979).

The MSCEIT includes a total of 141 items that assess an individual’s capacity to select a correct answer or answers to a question by performing a task and solving a problem on EI (Mayer et al., 1999). Used for consensus scoring, the MSCEIT norms were established with a sample of 5,000 adults who were 18 or older (Mayer et al., 2012). To establish expert scoring, 21 volunteer experts from the International Society for Research on Emotions (ISRE) scored the items, establishing “correct answers” for the MSCEIT (Mayer et al., 2003). According to MacCann et al. (2003), expert scoring is preferable to general consensus scoring based on psychometric reasoning. Knight (2009) wrote that general consensus is the most widely accepted
method for scoring in research. However, Mayer et al. (2003) stated that consensus and expert groups chose similar responses and that experts are the more reliable judges.

The scoring system for MSCEIT was designed to be standardized scores equivalent to IQ assessments (e.g., Wechsler’s IQ Test), with a mean of 100 and standard deviation of 15 (i.e., range = 0 to 150; Mayer et al., 2002; Mayer et al., 2003). The standardized scores can be interpreted in the following categories: Consider Development = 69 or less, Consider Improvement = 70 to 89, Low Average = 90 to 99, High Average = 100 to 109, Competent = 110 to 119, Strength 120 to 129, Significant Strength = 130 to Higher. Mayer et al. (2001, 2003) suggested that the ability model of EI purports that emotional knowledge exists in the context of communication and interaction, which supports the idea that answers can be scored as correct or incorrect. “The MSCEIT assessment is an ability-based measure of emotional intelligence. This means that [an individual] can get a low score on the MSCEIT, but through hard work and effort [he or she] can behave in an emotionally-intelligent manner. Conversely, [an individual] can get a high score on the MSCEIT but not utilize the emotional abilities that [he or she] possess” (Mayer et al., 2011, p. 3). The MSCEIT is written at an eighth-grade reading level and intended for individuals over the age of 17.

The MSCEIT yields two standardized area scores and four branch scores. The two areas are Experiential and Strategic. The Experiential area includes emotional perception and emotional integration and the Strategic area includes emotional understanding and emotional management (see Table 1). According to Mayer et al., (2011),

The Experiential Emotional Intelligence Score (EEIS) focuses on the identification of emotion and its productive use in thought. Your EEIS indicates the capacity to feel emotion and to do so productively. It focuses on more basic-level processing of emotion
(as opposed to the rational understanding and management of emotion). The EEIS is based on the Perceiving and Facilitation Branches of the emotional intelligence model. These two Branches may rely more on how feelings feel and how the individual responds and classifies such feelings. … Strategic Emotional Intelligence involves higher-level, conscious processing of emotions. These Branches require reasoning about emotions, how they develop over time, how they may be managed, and how to fit emotional management into social situations. They are strategic in the sense that one may use such information to chart an emotional course for oneself and others according to personal and social needs. The score is based on your performances on the Understanding and Managing Branches of emotional intelligence (p. 8).

Based on the analysis of the data, the test publisher provides five scores, including one overall (i.e., total) EI score and a score for each of the four branches (Brackett & Mayer, 2003). Each of the four branches is measured with two tasks. Branch One, emotional perception, is measured by 50 items with Faces and Pictures (Mayer et al., 2003). The Faces (20 items) and Pictures (30 items) subscales assess emotional identification in pictures of faces and scenery design. Using a Likert scale of 1 to 5, participants are asked to rank each item to the extent to which an emotion (i.e., happiness, sadness, fear, surprise, disgust, and excitement) is expressed in a face or picture. Emotional integration (i.e., Branch Two) is measured by 30 items with Sensations and Facilitation. For the Sensations (15 items) subscale, participants are asked to imagine experiencing a given unnamed emotion based on several descriptors, and then indicate which of the listed emotions most closely resembles their choice (e.g., surprised and shocked; MHS Assessments, n.d.). For the Facilitation (15 items) scale, participants are asked to identify moods that would be most beneficial in theoretical situations (e.g., which mood would be most
helpful in a stressful situation). Emotional understanding (i.e., Branch Three) is measured by 32 items with Changes (20 items) and Blends (12 items) that inquire about likely transitions of emotions in hypothetical scenarios. For example, participants are asked to select the emotion that best describes a combination of emotions. Participants are given a description of a fictional character’s life and feelings, and then asked to indicate the character’s emotion. Emotional management (i.e., Branch Four) is measured by 29 items with Emotional Management (20 items) and Emotional Relationships (9 items; Mayer et al., 2003). Participants are asked to rate the efficacy of an action that could impact their mood in a social situation with the following scale: a) very ineffective, b) somewhat ineffective, c) neutral, d) somewhat effective, e) very effective (MHS Assessments, n.d.).
Table 1

*MSCEIT Test Components*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Emotional Branches</th>
<th>Scales</th>
<th>Number of Items</th>
<th>Question Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiential</td>
<td>Perception</td>
<td>Faces</td>
<td>20</td>
<td>Pictures of faces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pictures</td>
<td>30</td>
<td>Pictures of scenery and designs</td>
</tr>
<tr>
<td></td>
<td>Integration</td>
<td>Sensations</td>
<td>15</td>
<td>Rating of feeling to given descriptor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Facilitation</td>
<td>15</td>
<td>Rating of usefulness of mood in given situation</td>
</tr>
<tr>
<td>Strategic</td>
<td>Understanding</td>
<td>Changes</td>
<td>20</td>
<td>Written descriptions of development of emotion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blends</td>
<td>12</td>
<td>Written description of blended emotions</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>Emotion</td>
<td>20</td>
<td>Ratings of effectiveness of alternative actions in self-management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emotion Relationships</td>
<td>9</td>
<td>Ratings of effectiveness of alternative actions in social management</td>
<td></td>
</tr>
</tbody>
</table>

*MSCEIT Psychometric Properties*

According to Brackett and Mayer (2003), the MSCEIT helps define the ability model of EI as a concrete construct with incremental validity that separates itself from other models of EI. Mayer et al. (2003) performed a confirmatory factor analysis with the MSCEIT by testing the fidelity of the four factor structures of the EI construct. The MSCEIT has been well reviewed and its psychometrics have been refined throughout the development of the MEIS to MSCEIT. The overall coefficient alpha for the MSCEIT is .90 (Mayer et al., 2000). The MSCEIT has two sets of reliabilities, depending on whether a general or expert criterion is employed (i.e., split-
half reliability, $r = .93$ for general and .91 for expert consensus) that indicates acceptable to excellent internal consistency (Brackett & Mayer, 2003). The four branch scores (i.e., emotional perception, emotional integration, emotional understanding, and emotional management) reliability coefficients range from .76 to .91 (Mayer et al., 2003). Mayer et al. (2003) reported the following reliabilities for the MSCEIT subscales: Faces ($\alpha = .82$), Pictures ($\alpha = .87$), Sensations ($\alpha = .55$), Facilitation ($\alpha = .63$), Blends ($\alpha = .62$), Changes ($\alpha = .68$), Emotional Management ($\alpha = .64$), and Emotional Relationships ($\alpha = .64$). Additionally, Hampel (2002) reported the following reliabilities for the subscales: Faces ($\alpha = .82$), Pictures ($\alpha = .83$), Sensations ($\alpha = .58$), Facilitation ($\alpha = .51$), Blends ($\alpha = .42$), Changes ($\alpha = .45$), Emotional Management ($\alpha = .56$), and Emotional Relationships ($\alpha = .57$). Spilt-half reliability coefficients for the four branches range from .80 to .91 (Mayer et al., 2003). Test-retest reliability after three weeks was .86 in the norming group that suggests the MSCEIT maintains stable (Brackett & Mayer, 2003).

The MSCEIT was found to be related to a variety of disciplines. Mayer et al. found that MSCEIT scores maintained small to moderate correlations with fluid intelligence (Gf) and crystallized intelligence (Gc) ($r = .08$ to .38; as cited in Barbash, 2015). Based on the small to moderate relationship between EI and Gc, EI’s individuality as a construct was maintained. Additionally, Ciarrochi et al. (2000) found that the MSCEIT had small to moderate correlations with measures of intelligence (IQ, $r = .05$ to .38), depending on the measure of intelligence. MSCEIT scores were found to be linked to verbal intelligence ($r = .36, p < .05$, Mayer et al., 2000b). Also, the MSCEIT was found to be related to other constructs such as job performance ($r = .28, p < .05$; Pusey, 2000), higher levels of customer service and rankings of team leader success ($r = .46, p < .05$; $r = .51, p < .05$; Rice, 1999), parental warmth ($r = .23, p < .05$, Mayer et al., 1999), and psychological well-being ($r = .28, p < .001$; Brackett & Mayer, 2003).
Jung’s Typology Test

The JTT™ was used from an online website company called HumanMetrics Inc. (Discover Your Personality Type, n.d.). The JTT™ was normed with over 1,000 respondents who were 18 to 70 years old (Validity and reliability of Jung’s Typology Test™, n.d.). The JTT™ is a 64-item online personality assessment that is based on Jung’s theory and Briggs-Meyers’s theory of personality type. The four criteria of personality type theory include: (a) Extraversion-Introversion (E-I), (b) Sensing-Intuition (S-N), (c) Thinking-Feeling (T-F), and (d) Judging-Perceiving (J-P). Each item is based on a given criterion where a respondent ranks how strongly he or she feels towards a preference for a given criterion (e.g., “You think that everything in the world is relative”). The four criterions yield 16 combinations of different personality types that include: ISTJ, ISFJ, INFJ, INTJ, ISTP, ISFP, INFP, INTP, ESTP, ESFP, ENFP, ENTP, ESTJ, ESFJ, ENFJ, and ENTJ. Items are scored based on one of three choices that includes YES/yes, uncertain, or NO/no that indicates the degree of agreement. A respondent is directed to select a response that best describes the statement to which he or she agrees. Directions indicate that a respondent should decide based on what a typical response or feeling would be for him or her, given the context of the statement. An example of an item is, “You are almost never late for your appointments.” Respondents’ results are immediately available upon completion of the JTT™. Based on a respondent’s answers, a personality type and an accompanying explanation are provided. The assessment is free and readily available and takes approximately 20 minutes to complete.

Jung’s Typology Test Psychometric Properties

Pearson correlations were performed on the JTT™ four criteria to determine spilt-half reliability that included .81 for the E-I, .79 for the S-N, .80 for the T-F, and .80 for the J-P
criteria (Validity and reliability of Jung’s Typology Test™, n.d.). Test-retest reliability for under one week for each of the criteria were .83 for the E-I, .79 for the S-N, .78 for the T-F, and .81 for the J-P. Test-retest reliability for over one week was .79 for E-I, .76 for S-N, .76 for T-F, and .78 for J-P. Reliability for formula coincidence was 89% for under one week and 84% for over one week. Participants’ scores on JTT™ were input categorically as one of the 16 types into SPSS Version 24.

Research Questions and Data Analysis

The researcher analyzed the data using SPSS Version 24 with an alpha level of .05 to address the potential for a Type I error. The following statistical analyses were used for each of the three research questions.

Research Question One

What are the descriptive statistics for demographics (i.e., gender, age, race, theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), level of emotional intelligence (i.e., MSCEIT), and personality type (i.e., JTT™) of counselor education graduate students?

Data Analysis

The researcher described frequencies and descriptive statistics for the demographics (i.e., gender, age, race, theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), level of emotional intelligence (i.e., MSCEIT), and personality type (i.e.,
Additional descriptive analyses were conducted for EI means and standard deviations by demographics (i.e., gender, race, theoretical orientation). In addition, means and standard deviations were calculated for level of enrollment by overall EI scores and personality type dichotomies by all EI Scores.

**Research Question Two**

What is the strength of the relationships between counselor education graduate students’ gender, age, race, theoretical orientation, academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), level of EI (i.e., MSCEIT), and personality type (i.e., JTT™)?

**Data Analysis**

As suggested by Tabachnick and Fidell (2013), preliminary analyses were inspected using univariate descriptive statistics for accuracy of input. Missing data were evaluated and addressed. Pairwise plots were screened for nonlinearity and heteroscedasticity. Univariate and multivariate outliers were identified and addressed. Variables were screened for multicollinearity and singularity.

Spearman correlations between counselor education graduate students’ gender, age, race, theoretical orientation, academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), level of EI (i.e., MSCEIT), and personality type (i.e., JTT™) were analyzed. A Spearman rho correlation is an appropriate analysis when working with ordinal or ranked data or
data that fails to meet the criteria for Pearson correlations (Pallant, 2016). Pearson correlations are appropriate for interval level variables as well as one dichotomous variable (Pallant, 2016).

A correlation between gender and overall EI (i.e., MSCEIT) scores was performed. Four correlations were performed between gender and all EI subscale scores (i.e., emotional perception, integration, understanding, and management). Correlations between gender and theoretical orientation and personality type (i.e., JTT™) were also performed.

A correlation between age and overall EI (i.e., MSCEIT) scores was performed. Four correlations were performed between age and all EI subscale scores (i.e., emotional perception, integration, understanding, and management). Correlations between age and theoretical orientation was performed and personality type (i.e., JTT™) were also performed.

A correlation between race and overall EI (i.e., MSCEIT) scores was performed. Four correlations were performed between race and all EI subscale scores (i.e., emotional perception, integration, understanding, and management). Correlations between race and theoretical orientation and personality type (i.e., JTT™) were also performed.

A correlation between theoretical orientation and overall EI (i.e., MSCEIT) scores was performed. Four correlations were performed between theoretical orientation and all EI subscale scores (i.e., emotional perception, integration, understanding, and management). A correlation between theoretical orientation and personality type (i.e., JTT™) was also performed.

A correlation between academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study) and overall EI (i.e., MSCEIT) scores was performed. Four correlations were performed between academic experience (i.e., level enrolled in a counselor education program:}
master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study) and all EI subscale scores (i.e., emotional perception, integration, understanding, and management).

A correlation between academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study) and theoretical orientation was performed. A correlation between academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study) and personality type (i.e., JTT™) was performed.

Correlations between demographics (i.e., gender, age, race, and theoretical orientation (i.e., cognitive, affective, and other)) and personality type dichotomies (i.e., Extraversion/Introversion, Sensing/Intuition, Thinking/Feeling, and Judging/Perceiving) were performed. Correlations between personality type dichotomies (i.e., Extraversion/Introversion, Sensing/Intuition, Thinking/Feeling, and Judging/Perceiving) and overall EI scores were performed. Also, correlations between personality type dichotomies (i.e., Extraversion/Introversion, Sensing/Intuition, Thinking/Feeling, and Judging/Perceiving) and all EI subscale scores (i.e., emotional perception, integration, understanding, and management) were performed.

**Research Question Three**

Do the demographics (i.e., gender, age, race, theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum,
master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), and personality type (i.e., JTT™) predict counselor education graduate students’ level of emotional intelligence (i.e., MSCEIT)?

Data Analysis

As suggested by Tabachnick and Fidell (2013), prior to the analysis in the present research, variables were screened for normality, linearity, and homoscedasticity. The purpose of a multiple regression is to discover about the relationship between the independent variables and the dependent variable (Tabachnick and Fidell, 2013). Multiple regressions were performed to analyze counselor education graduate students’ demographics (i.e., gender, age, race, theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed, and number of years of study completed in counselor education graduate study), personality type (i.e., JTT™), and EI (i.e., MSCEIT). The independent variables were the demographics (i.e., gender, age, race, theoretical orientation), academic experience (i.e., number of coursework hours completed and number of years of study completed in counselor education graduate study), and personality type (i.e., JTT™).

A stepwise analysis initially included all 19 predictor variables: (a) gender (female), (b) gender (male), (c) age, (d) race (White), (e) race (Black), (f) race (Hispanic), (g) race (other), (h) theoretical orientation (affective), (i) theoretical orientation (cognitive), (j) theoretical orientation (other), (k) level enrolled in coursework (master’s pre-practicum), (l) level enrolled in coursework (master’s practicum/internship), (m) level enrolled in coursework (doctoral), (n) number of coursework hours completed, (o) number of years completed of graduate study, (p)
personality type (Extraversion/Introversion), (q) personality type (Sensing/Intuition), (r) personality type (Thinking/Feeling), and (s) personality type (Judging/Perceiving). In a Backward (Stepwise) procedure, the analysis should initially include all of the predictor variables; variables with $p$ values higher than a designated cutoff point to be removed one by one until only variables with $p$ values at or below the cutoff point remains in the model in order to achieve a parsimonious model (Tabachnick & Fidell, 2013). For linear regressions using the Backward method, SPSS defaults to a .05 $p$ value for variable entry and .10 for variable removal, therefore a .10 $p$ value was used as the criteria for variable removal in the present research.

The first regression examined the relationship between the dependent variable of overall EI scores (i.e., MSCEIT) and the independent variables of demographics (i.e., gender, age, race, and theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed, and number of years of study completed in counselor education graduate study), and personality type (i.e., JTT™). The next four regressions examined the relationship between the dependent variables for each of the EI subscale scores (i.e., MSCEIT branches: emotional (a) perception, (b) integration, (c) understanding, and (d) management scores; and the independent variables of demographics (i.e., gender, age, race, and theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed, and number of years of study completed in counselor education graduate study), and personality type (i.e., JTT™).
Summary

Chapter three included the purpose of the research, research design, research questions, hypotheses, variables, participants, and procedures. Additionally, the instrumentation and psychometric properties of the instruments as well as the data analysis were provided. In chapter four the researcher will present the results of the research, followed by interpretation and discussion in chapter five.
Chapter IV

Results

The purpose of the present research was to explore the relationship between counselor education graduate students’ demographics, academic experience, emotional intelligence (EI), and personality types. Participants were graduate students who were enrolled in CACREP programs in southern Louisiana and Texas. Participants \((n = 135)\) were recruited through in-classroom presentations and online participation. They were asked to complete a Demographic Survey, the Mayer-Caruso-Salovey Emotional Intelligence Test (MSCEIT), and Jung’s Typology Test (JTT™). One participant was eliminated due to outlier MSCEIT scores, leaving 134 participants.

In this chapter, the participants’ demographic characteristics and descriptive statistics are presented. Correlations between participants’ demographic characteristics, level of EI, and personality types are provided. In addition, statistically significant results from multiple regressions are provided for participants’ demographics, level of EI, and personality types.

Research Question One

What are the descriptive statistics for demographics (i.e., gender, age, race, theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), level of emotional intelligence (i.e., MSCEIT), and personality type (i.e., JTT™) of counselor education graduate students?
Data Analysis

Descriptive statistics for counselor education graduate students’ demographics (i.e., gender, age, race, theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), level of EI (i.e., MSCEIT), and personality type (i.e., JTT™) were analyzed. The majority of participants \( n = 107, 79.85\% \) identified as female and the remaining as male \( n = 25, 18.66\% \). Two participants who identified as transgender were eliminated from any statistical analyses that involved gender due to insufficient number of participants for a category to effectively perform statistical procedures \( n = 2, 1.49\% \). Participants’ ages ranged from 21 to 55 \( M = 30.36, SD = 7.83 \). Two participants did not respond to age. For race, 74 participants \( 55.22\% \) identified as White/Caucasian, 44 \( 32.84\% \) as Black/African American, 4 as Hispanic/Latino \( 2.99\% \), and 10 \( 7.46\% \) as Other (i.e., \( n = 3 \), American Indian/Alaska Native; \( n = 2 \), Native Hawaiian as Pacific Islander; \( n = 4 \), Biracial; or \( n = 1 \), Mediterranean; see Table 2). Due to an insufficient number of responses for American Indian/Alaska Native, Asian, Native Hawaiian, Pacific Islander, Biracial, or Other, those categories were collapsed into one category (i.e., Other) to effectively perform statistical analyses. Two participants did not respond to race \( 1.49\% \), see Table 2).
Table 2

Frequencies and Descriptives for Gender, Age, and Race (N = 134)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>25</td>
</tr>
<tr>
<td>Female</td>
<td>107</td>
</tr>
<tr>
<td>Transgender</td>
<td>2</td>
</tr>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>74</td>
</tr>
<tr>
<td>Black/African American</td>
<td>44</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
</tr>
<tr>
<td>No Response</td>
<td>2</td>
</tr>
</tbody>
</table>

Nearly half of participants (n = 65, 48.51%) identified their theoretical orientation as cognitive (i.e., cognitive/behavioral therapy n = 43; solution-focused n = 12; acceptance and commitment therapy n = 1, reality therapy n = 2; rational emotive behavioral therapy (REBT) n = 1; evolutionary psychology n = 1; narrative therapy n = 2; choice therapy n = 1; and Adlerian theory n = 2), 60 (44.77%) as affective (i.e., psychoanalytic n = 1; systems n = 3; person-Centered n = 21; Gestalt n = 7; existential n = 23; attachment n = 1; post-modern n = 1; and feminist n = 3), and 8 (5.97%) as Other (undecided, n = 4; or integrative, n = 4). One participant did not respond to theoretical orientation (0.75%, see Table 3).
For academic experience, 86 participants (64.18%) identified as graduate students who were enrolled in master’s pre-practicum, 34 (25.37%) were currently enrolled in master’s practicum/internship, and 14 (10.45%) were enrolled at the doctoral level. In terms of the number of coursework hours completed, participants’ hours ranged from 0 to 127 ($M = 25.65$, $SD = 27.04$) and number of years of graduate study completed in a counselor education graduate program ranged from 0 to 12 ($M = 1.42$, $SD = 1.58$, see Table 4).

### Table 3

**Frequencies for Theoretical Orientation (N = 134)**

<table>
<thead>
<tr>
<th></th>
<th>$f$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>65</td>
<td>48.51</td>
</tr>
<tr>
<td>Affective</td>
<td>60</td>
<td>44.77</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>5.97</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>0.75</td>
</tr>
</tbody>
</table>
Table 4

*Frequencies and Descriptives for Academic Experience (N = 134)*

<table>
<thead>
<tr>
<th></th>
<th>f</th>
<th>%</th>
<th>Range</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level Enrolled in Coursework</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master’s Pre-Practicum</td>
<td>86</td>
<td>64.18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master’s Practicum/Internship</td>
<td>34</td>
<td>25.37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctoral</td>
<td>14</td>
<td>10.45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of Coursework Hours</strong></td>
<td></td>
<td></td>
<td>0-127</td>
<td>25.65</td>
<td>27.04</td>
</tr>
<tr>
<td><strong>Number of Years of Study</strong>*</td>
<td></td>
<td></td>
<td>0-12</td>
<td>1.42</td>
<td>1.58</td>
</tr>
</tbody>
</table>

*Note.* *N* = 133. One participant did not respond to number of years of graduate study.

For participants’ overall EI scores, the range was 62 to 150 (\(M = 104.56, SD = 17.21\)). For EI Branch One (i.e., emotional *perception*), participants’ scores ranged from 32 to 140 (\(M = 104.30, SD = 16.08\)). For EI Branch Two (i.e., emotional *integration*), scores ranged from 60 to 144 (\(M = 101.86, SD = 16.11\)). For EI Branch Three (i.e., emotional *understanding*), scores ranged from 75 to 145 (\(M = 103.45, SD = 16.05\)). For EI Branch Four (i.e., emotional *management*), scores ranged from 45 to 144 (\(M = 102.29, SD = 15.10\)). One participant did not respond to Branch Two, *perception*, which resulted in that participant’s Branch Two and overall EI score being eliminated from the analysis (see Table 5).
Table 5

*Descriptives for All Emotional Intelligence Scores (N = 134)*

<table>
<thead>
<tr>
<th></th>
<th>Range</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall EI*</td>
<td>62-150</td>
<td>104.56</td>
<td>17.21</td>
</tr>
<tr>
<td>Branch One - Perception</td>
<td>32-140</td>
<td>104.30</td>
<td>16.08</td>
</tr>
<tr>
<td>Branch Two*- Integration</td>
<td>60-144</td>
<td>101.86</td>
<td>16.11</td>
</tr>
<tr>
<td>Branch Three - Understanding</td>
<td>75-145</td>
<td>103.45</td>
<td>16.05</td>
</tr>
<tr>
<td>Branch Four - Management</td>
<td>45-144</td>
<td>102.29</td>
<td>15.10</td>
</tr>
</tbody>
</table>

*Note. *N = 133. One participant did not complete Branch Two questions, which was also not included in overall EI.*

For personality type, nearly a quarter of participants identified as INFJ (*n* = 32, 23.88%), 20 as ENFJ (14.92%), 17 as ISFJ (12.69%), 14 as ENFP (10.45%), 14 as INTJ (10.45%), 10 as INFP (7.46%), 7 as ESFJ (5.22%), 5 as INTP (3.73%), 5 as ESFP (3.73%), 3 as ENTJ (2.24%), 3 as ISTJ (2.24%), 2 as ISFP (1.49%), and 1 as ENTP (0.75%). One participant did not respond to personality type (0.75%, see Table 6).
Table 6

*Frequencies for Personality Types (N = 134)*

<table>
<thead>
<tr>
<th>Type</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFJ</td>
<td>32</td>
<td>23.88</td>
</tr>
<tr>
<td>ENFJ</td>
<td>20</td>
<td>14.92</td>
</tr>
<tr>
<td>ISFJ</td>
<td>17</td>
<td>12.69</td>
</tr>
<tr>
<td>ENFP</td>
<td>14</td>
<td>10.45</td>
</tr>
<tr>
<td>INTJ</td>
<td>14</td>
<td>10.45</td>
</tr>
<tr>
<td>INFP</td>
<td>10</td>
<td>7.46</td>
</tr>
<tr>
<td>ESFJ</td>
<td>7</td>
<td>5.22</td>
</tr>
<tr>
<td>INTP</td>
<td>5</td>
<td>3.73</td>
</tr>
<tr>
<td>ESFP</td>
<td>5</td>
<td>3.73</td>
</tr>
<tr>
<td>ENTJ</td>
<td>3</td>
<td>2.24</td>
</tr>
<tr>
<td>ISTJ</td>
<td>3</td>
<td>3.24</td>
</tr>
<tr>
<td>ISFP</td>
<td>2</td>
<td>1.49</td>
</tr>
<tr>
<td>ENTP</td>
<td>1</td>
<td>0.75</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>0.75</td>
</tr>
</tbody>
</table>

For the personality dichotomy of General Attitude (i.e., Extraversion/Introversion), the majority of participants identified as Extroversion (n = 50, 37.31%), whereas 83 identified as Introversion (61.94%). One participant did not respond (0.75%) to General Attitude dichotomy.

For the personality dichotomy of Perception (i.e., Sensing/Intuition), the majority identified as Intuition (n = 99, 73.88%), whereas 34 identified as Sensing (25.37%). One participant did not respond to the Perception dichotomy (0.75%). For the Process dichotomy (i.e.,
Thinking/Feeling), the majority identified as Feeling \((n = 106, 79.10\%)\), whereas 27 identified as Thinking (20.15\%). One participant did not respond to the Process dichotomy (0.75\%). For the Implementation dichotomy (i.e., Judging/Perceiving), the majority identified as Judging \((n = 96, 71.64\%)\), whereas 37 identified as Perceiving (27.61\%). One participant did not respond to the Implementation dichotomy (0.75\%, see Table 7).
Table 7

*Frequencies for Personality Dichotomies (N = 134)*

<table>
<thead>
<tr>
<th></th>
<th>General Attitude</th>
<th>Perception</th>
<th>Process</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Extraversion</td>
<td>50</td>
<td>37.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introversion</td>
<td>83</td>
<td>61.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>0.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensing</td>
<td>34</td>
<td>25.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intuition</td>
<td>99</td>
<td>73.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>0.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thinking</td>
<td></td>
<td></td>
<td>27</td>
<td>20.15</td>
</tr>
<tr>
<td>Feeling</td>
<td></td>
<td></td>
<td>106</td>
<td>79.10</td>
</tr>
<tr>
<td>No Response</td>
<td></td>
<td></td>
<td>1</td>
<td>0.75</td>
</tr>
<tr>
<td>Judging</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceiving</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Response</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Each dichotomy N = 134
Additional Descriptive Analyses

Additional descriptive analyses were conducted for means and standard deviations of EI scores by demographics (i.e., gender, race, theoretical orientation). In addition, means and standard deviations were calculated for level of enrollment by overall EI scores and personality type dichotomies by all EI Scores.

Gender by Emotional Intelligence Scores

Means and standard deviations were analyzed for counselor education graduate students’ gender and overall EI as well as EI Branches One, Two, Three, and Four scores (i.e., emotional perception, integration, understanding, and management) are provided (see Table 8).

Table 8

Means and Standard Deviations for Gender by All EI Scores (N = 132)

<table>
<thead>
<tr>
<th></th>
<th>Overall EI</th>
<th>Branch One Emotional Perception</th>
<th>Branch Two Emotional Integration</th>
<th>Branch Three Emotional Understanding</th>
<th>Branch Four Emotional Management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>F</td>
<td>106</td>
<td>105.89*</td>
<td>18.11*</td>
<td>105.60</td>
<td>16.78</td>
</tr>
<tr>
<td>M</td>
<td>25</td>
<td>98.96</td>
<td>12.09</td>
<td>98.59</td>
<td>12.01</td>
</tr>
</tbody>
</table>

Note. F = Female, M = Male; EI = Emotional Intelligence,

Note. Two participants identified as transgender and were eliminated due to insufficient number of participants for a category to effectively perform statistical procedures.

Note. *N = 105. One female participant had an incomplete Overall EI score due to a failure to complete Branch Two questions.

Race by Emotional Intelligence Scores

Additional analyses for means and standard deviations between the counselor education graduate students’ race and overall EI as well as EI Branches One, Two, Three, and Four scores
(i.e., emotional perception, integration, understanding, and management) are provided (see Table 9).

Table 9

*Means and Standard Deviations for Race by All EI Scores (N = 132)*

<table>
<thead>
<tr>
<th>Race</th>
<th>Overall EI</th>
<th>Branch One Emotional Perception</th>
<th>Branch Two Emotional Integration</th>
<th>Branch Three Emotional Understanding</th>
<th>Branch Four Emotional Management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N  M</td>
<td>SD M   SD</td>
<td>M   SD</td>
<td>M   SD</td>
<td>M   SD</td>
</tr>
<tr>
<td>W</td>
<td>74 109.23a</td>
<td>18.00a 104.58 18.21</td>
<td>104.72a 15.11a</td>
<td>109.81 15.27</td>
<td>104.54 14.41</td>
</tr>
<tr>
<td>B</td>
<td>44 97.12</td>
<td>16.40 103.53 14.07</td>
<td>96.08 16.93</td>
<td>93.64 13.11</td>
<td>98.86 16.42</td>
</tr>
<tr>
<td>H</td>
<td>4 104.27</td>
<td>11.75 108.44 13.43</td>
<td>101.26 14.21</td>
<td>97.73 6.86</td>
<td>103.44 10.26</td>
</tr>
<tr>
<td>O</td>
<td>10 103.82</td>
<td>101.60 102.79 9.14</td>
<td>103.17 13.27</td>
<td>105.48 13.63</td>
<td>99.77 15.78</td>
</tr>
</tbody>
</table>

*Note. *N = 73. One White participant did not complete Branch Two questions, which was also not calculated in Overall EI.

*Note. Race: W = White, B = Black, H = Hispanic, O = Other; EI= Emotional Intelligence.*

**Theoretical Orientation by Emotional Intelligence Scores**

Additional analyses between the counselor education graduate students’ theoretical orientation and overall EI as well as EI Branches One, Two, Three, and Four scores (i.e., emotional perception, integration, understanding, and management) are provided (see Table 10).
Table 10

Means and Standard Deviations for Theoretical Orientation by All EI Scores (N = 133)

<table>
<thead>
<tr>
<th></th>
<th>Overall EI</th>
<th>Branch One Emotional Perception</th>
<th>Branch Two Emotional Integration</th>
<th>Branch Three Emotional Understanding</th>
<th>Branch Four Emotional Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>C</td>
<td>65</td>
<td>103.62a 15.92b</td>
<td>104.22 12.67</td>
<td>100.48a 14.45b</td>
<td>100.84 15.70</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>60</td>
<td>105.79 18.29</td>
<td>104.12 19.51</td>
<td>103.23 17.92</td>
</tr>
<tr>
<td></td>
<td>O</td>
<td>8</td>
<td>105.67 20.16</td>
<td>108.47 13.22</td>
<td>103.29 16.50</td>
</tr>
</tbody>
</table>

Note. Theoretical Orientation: C = Cognitive, A = Affective, O = Other.

Note. aN = 64. One participant with Cognitive did not complete Branch Two questions, which was also not calculated in Overall EI.

Level of Enrollment by Overall Emotional Intelligence Scores

In table 11, the ranges, means, standard deviations, skewness and kurtosis for counselor education graduate students’ levels of enrollment (i.e., master’s pre-practicum, master’s practicum/internship, or doctoral) are provided for all EI scores.
Table 11

Descriptives for Level of Enrollment by Overall EI Scores (N = 133)

<table>
<thead>
<tr>
<th>Level</th>
<th>N</th>
<th>Range</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s Pre-Practicum</td>
<td>86</td>
<td>68-50</td>
<td>105.90</td>
<td>16.10</td>
<td>.39</td>
<td>.50</td>
</tr>
<tr>
<td>Master’s Practicum/Internship</td>
<td>34</td>
<td>62-145</td>
<td>101.01</td>
<td>18.85</td>
<td>.21</td>
<td>-.22</td>
</tr>
<tr>
<td>Doctoral</td>
<td>14</td>
<td>79-138</td>
<td>104.66</td>
<td>19.83</td>
<td>.22</td>
<td>-.92</td>
</tr>
</tbody>
</table>

Note. EI = Emotional Intelligence

Note. One participant had an incomplete overall EI score due to a failure to complete Branch Two questions.

All Emotional Intelligence Scores by Personality Dichotomies

Additional analyses including means and standard deviations for counselor education graduate students’ overall EI as well as EI Branches One, Two, Three, and Four (i.e., emotional perception, integration, understanding, and management) are provided by personality dichotomies (see Table 12).
Table 12

Descriptives for All EI Scores by Personality Dichotomies (N = 133)

<table>
<thead>
<tr>
<th>PD</th>
<th>Overall EI</th>
<th>Branch One Emotional Perception</th>
<th>Branch Two Emotional Integration</th>
<th>Branch Three Emotional Understanding</th>
<th>Branch Four Emotional Management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>E</td>
<td>50</td>
<td>103.36</td>
<td>16.44</td>
<td>102.86</td>
<td>17.85</td>
</tr>
<tr>
<td>I</td>
<td>83</td>
<td>105.15&lt;sup&gt;a&lt;/sup&gt;</td>
<td>17.76&lt;sup&gt;a&lt;/sup&gt;</td>
<td>105.07</td>
<td>15.05</td>
</tr>
<tr>
<td>S</td>
<td>34</td>
<td>105.11&lt;sup&gt;b&lt;/sup&gt;</td>
<td>13.84&lt;sup&gt;b&lt;/sup&gt;</td>
<td>106.68</td>
<td>13.42</td>
</tr>
<tr>
<td>N</td>
<td>99</td>
<td>104.26</td>
<td>18.30</td>
<td>103.40</td>
<td>16.93</td>
</tr>
<tr>
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<td>27</td>
<td>101.80</td>
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<td>15.15</td>
</tr>
<tr>
<td>F</td>
<td>106</td>
<td>105.16&lt;sup&gt;‘&lt;/sup&gt;</td>
<td>17.40&lt;sup&gt;‘&lt;/sup&gt;</td>
<td>103.91</td>
<td>16.42</td>
</tr>
<tr>
<td>J</td>
<td>96</td>
<td>103.61&lt;sup&gt;d&lt;/sup&gt;</td>
<td>17.40&lt;sup&gt;d&lt;/sup&gt;</td>
<td>104.15</td>
<td>16.10</td>
</tr>
<tr>
<td>P</td>
<td>37</td>
<td>106.69</td>
<td>16.91</td>
<td>104.46</td>
<td>16.42</td>
</tr>
</tbody>
</table>

*Note.* PD = Personality Dichotomy; EI = Emotional Intelligence; TO = Theoretical Orientation.

*Note.* One participant did not complete Branch Two questions.

*Note.* One participant did not respond to Personality Type.

*Note.* <sup>a</sup>N = 82. One participant did not complete Branch Two questions, which was also not calculated in overall EI, <sup>b</sup>N = 33. One participant did not complete Branch Two questions, which was also not calculated in overall EI, <sup>‘</sup>N = 105. One participant did not complete Branch Two questions, which was also not calculated in overall EI, and <sup>d</sup>N = 95. One participant did not complete Branch Two questions, which was also not calculated in overall EI.

**Research Question Two**

What is the strength of the relationships between counselor education graduate students’ gender, age, race, theoretical orientation, academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number
of coursework hours completed; and number of years of study completed in counselor education graduate study), level of EI (i.e., MSCEIT), and personality type (i.e., JTT™)?

**Data Analysis**

Spearman correlations were conducted to analyze the variables of participants’ gender, age, race, theoretical orientation, academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), their overall EI scores and each of the four branches (i.e., emotional perception, integration, understanding, and management), and personality type. Correlations at an alpha level of less than or equal to .05 were interpreted by the following values: .00 to .19 = very weak, .20 to .39 = weak, .40 to .59 = moderate, .60 to .79 = strong, and .80 to 1.0 = very strong (Evans, 1996). Also, correlations between overall EI scores and each of the four branches (i.e., emotional perception, integration, understanding, and management) and personality type dichotomies were performed. Finally, correlations between demographics (i.e., gender, age, race, theoretical orientation) and personality type dichotomies were performed.

**Demographics by All Emotional Intelligence Scores**

Spearman correlations were conducted with participants’ demographics (i.e., gender, age, race, and theoretical orientation) and EI scores (i.e., overall, Branches One, Two, Three, and Four; emotional perception, integration, understanding, and management), theoretical orientation, and personality type.

For participants’ gender, weak, significant negative correlations were found for EI Branch One and Two (i.e., emotional perception, integration; \( r = -.20, -.20 \) respectively, \( p < .05 \); see Table 13). Very weak non-significant correlations were found for gender and overall EI,
Branches Three, and Four (i.e., emotional understanding, and management) of EI ($r = -.17, .03, -.11$ respectively, $p > .05$). For participants’ age, a very weak, significant negative correlation was found for Branch Two, integration of EI ($r = -.18$, $p < .05$; see Table 13). Very weak non-significant correlations were found for age and overall EI and Branches One, Three, and Four (i.e., emotional perception, understanding, and management) of EI ($r = -.05, .01, .07, -.08$ respectively, $p > .05$). For participants’ race, weak, significant negative correlations were found for overall EI and Branches Two and Three (i.e., emotional integration and understanding) of EI ($r = -.24$, $p < .001$; $r = -.17$, $p < .05$; $r = -.38$, $p < .01$, respectively; see Table 13). Very weak non-significant, negative correlations were found for race and Branches One and Four (i.e., emotional perception and management) of EI ($r = -.06, -.13$ respectively, $p > .05$). For participants’ theoretical orientation, a weak, significant negative correlation was found for Branch Three (i.e., emotional understanding) of EI ($r = -.21$, $p < .05$; see Table 13). A weak, significant positive correlation was found between theoretical orientation and personality type ($r = .18$, $p < .05$). Very weak non-significant correlations were found for theoretical orientation and overall EI and Branches One, Two, and Four (i.e., emotional perception, integration, and management) of EI ($r = -.05, .01, -.08, .04$, respectively, $p > .05$). For theoretical orientation, very weak non-significant correlations were found for gender, age, and race ($r = -.13, .05, .12$, respectively, $p > .05$).

For counselor education graduate students’ academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study); weak, non-significant correlations were found with overall EI ($r = -.10, .01, -.05$ respectively, $p > .05$; see Table 13). For counselor education graduate students’
academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), weak, non-significant correlations were found with EI Branch One (i.e., emotional perception; \( r = -.16, .04, -.10 \) respectively, \( p > .05 \); see Table 13). For counselor education graduate students’ academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), weak, non-significant negative correlations were found with EI Branch Two (i.e., emotional integration; \( r = -.13, -.05, -.10 \) respectively, \( p > .05 \); see Table 13). For counselor education graduate students’ academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), weak, non-significant positive correlations were found with EI Branch Three (i.e., emotional understanding; \( r = .03, .13, .09 \) respectively, \( p > .05 \); see Table 13). For counselor education graduate students’ academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), weak, non-significant negative correlations were found with EI Branch Four (i.e., emotional management; \( r = -.08, -.02, -.02 \) respectively, \( p > .05 \); see Table 13).

For counselor education graduate students’ academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor
education graduate study), weak, non-significant positive and negative correlations were found with theoretical orientation ($r = .10, .08, .06$ respectively, $p > .05$; see Table 13).

For counselor education graduate students’ academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; and number of years of study completed in counselor education graduate study), weak, non-significant positive correlations were found with personality type ($r = .04, .06, .03$ respectively, $p > .05$; see Table 13).
Table 13

Correlations for Demographics and Academic Experience by All EI Scores and Personality Type (N = 133)

<table>
<thead>
<tr>
<th></th>
<th>Overall EI</th>
<th>Branch One</th>
<th>Branch Two</th>
<th>Branch Three</th>
<th>Branch Four</th>
<th>TO</th>
<th>PT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.17ª</td>
<td>-.20ª</td>
<td>-.20ª</td>
<td>.03ª</td>
<td>-.11ª</td>
<td>-.13ª</td>
<td>-.06ª</td>
</tr>
<tr>
<td>Age</td>
<td>-.05ª</td>
<td>-.01ª</td>
<td>-.18ª</td>
<td>.07ª</td>
<td>-.08ª</td>
<td>.05ª</td>
<td>.06ª</td>
</tr>
<tr>
<td>Race</td>
<td>-.24**ª</td>
<td>-.06ª</td>
<td>-.17ª</td>
<td>.38**ª</td>
<td>-.13ª</td>
<td>.12ª</td>
<td>-.04ª</td>
</tr>
<tr>
<td>TO</td>
<td>-.05ª</td>
<td>.01</td>
<td>-.08ª</td>
<td>-.21ª</td>
<td>.04</td>
<td>----</td>
<td>.18ª</td>
</tr>
<tr>
<td>Level</td>
<td>-.10</td>
<td>-.16ª</td>
<td>-.13</td>
<td>.03ª</td>
<td>-.08ª</td>
<td>.10</td>
<td>.04</td>
</tr>
<tr>
<td>Hours</td>
<td>.01</td>
<td>-.04ª</td>
<td>-.05</td>
<td>.13ª</td>
<td>-.02ª</td>
<td>-.08</td>
<td>.06</td>
</tr>
<tr>
<td>Years</td>
<td>-.05</td>
<td>-.10</td>
<td>-.10</td>
<td>.09</td>
<td>-.02</td>
<td>.06ª</td>
<td>.03</td>
</tr>
</tbody>
</table>

Note. *p < .05; **p < .01.

Note. EI = Emotional Intelligence; Branch One (i.e., Emotional Perception); Branch Two (i.e., Emotional Integration); Branch Three (i.e., Emotional Understanding); Branch Four (i.e., Emotional Management), TO = Theoretical Orientation; Level = Level Enrolled in Counselor Education; Hours = Number of Coursework Hours; Years = Number of Years of Graduate Study.

Note. a N = 131, b N = 132, and c N = 134.

Note. One participant did not complete Branch Two questions, which was also not calculated in overall EI. Two participants identified as transgender were eliminated due to statistical non-significance. Two participants did not respond to age. Two participants did not respond to race. One participant did not respond to theoretical orientation. One participant did not respond to Number of Years of Graduate Study. One participant did not respond to PT.
For gender, a very weak, significant positive correlation was found for Judging/Perceiving ($r = .19, p < .05$; see Table 14). Very weak non-significant correlations were found with gender and Extroversion/Introversion, Sensing/Intuition, and Thinking/Feeling ($r = -.07, .09, .07, -.12$ respectively, $p > .05$). For race, very weak, non-significant correlations were found with Extraversion/Introversion, Sensing/Intuition, Thinking/Feeling, and Judging/Perceiving ($r = -.08, -.17, -.14,.00$, respectively, $p > .05$). For age, very weak, non-significant correlations were found with Extraversion/Introversion, Sensing/Intuition, Thinking/Feeling, and Judging/Perceiving ($r = .12, .13, -.01, -.12, .02$, respectively, $p > .05$, see Table 14).

For theoretical orientation, a weak, significant negative correlation was found with Sensing/Intuition ($r = -.22, p < .05$; see Table 14). Very weak non-significant correlations were found with theoretical orientation and Extraversion/Introversion, Thinking/Feeling, and Judging/Perceiving ($r = .07, -.02, -.09$, respectively, $p > .05$). Participants who identified as cognitive for their theoretical orientation demonstrated a weak, significant negative correlation with Sensing/Intuition ($r = -.19, p < .05$), whereas very weak non-significant correlations with Extroversion/Introversion, Thinking/Feeling, and Judging/Perceiving ($r = -.10, .03, -.02$, respectively, $p > .05$), indicating that cognitive counselor education graduate students identified more with Intuition. Participants who identified as affective (i.e., psychoanalytic, systems, person-centered, Gestalt, existential, attachment, post-modern, and feminist) in their theoretical orientations demonstrated a weak, significant negative correlation with Sensing/Intuition ($r = .22, p < .05$), indicating that affective counselor education graduate students identified more with Intuition. Very weak non-significant correlations with Extraversion/Introversion,
Thinking/Feeling, and Judging/Perceiving ($r = .00, -.01, .06$, respectively, $p > .05$). Participants who identified as other (i.e., integrative or undecided) for their theoretical orientation demonstrated a weak, significant positive correlation with Extraversion/Introversion ($r = .20$, $p < .05$), indicating that counselor education graduate students who identify as integrative or undecided also are Introverted. Very weak non-significant correlations with Sensing/Intuition, Thinking/Feeling, and Judging/Perceiving ($r = -.07, -.03, -.09$; respectively, $p > .05$, Table 14).

**Table 14**

*Correlations for Demographics by Personality Dichotomies (N = 132)*

<table>
<thead>
<tr>
<th></th>
<th>Extraversion/Introversion</th>
<th>Sensing/Intuition</th>
<th>Thinking/Feeling</th>
<th>Judging/Perceiving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.07ª</td>
<td>.09ª</td>
<td>-.12ª</td>
<td>.19ª***</td>
</tr>
<tr>
<td>Age</td>
<td>.12ª</td>
<td>.13ª</td>
<td>-.01ª</td>
<td>.02ª</td>
</tr>
<tr>
<td>Race</td>
<td>-.08ª</td>
<td>-.17ª</td>
<td>-.14ª</td>
<td>.00ª</td>
</tr>
<tr>
<td>Theoretical Orientation</td>
<td>.07</td>
<td>-.22*</td>
<td>-.02</td>
<td>-.09</td>
</tr>
<tr>
<td>Theoretical Orientation (cognitive)</td>
<td>-.10</td>
<td>-.19*</td>
<td>.03</td>
<td>-.02</td>
</tr>
<tr>
<td>Theoretical Orientation (affective)</td>
<td>.00</td>
<td>.22*</td>
<td>-.01</td>
<td>.06</td>
</tr>
<tr>
<td>Theoretical Orientation (other)</td>
<td>.20*</td>
<td>-.07</td>
<td>-.03</td>
<td>-.09</td>
</tr>
</tbody>
</table>

*Note.* *p < .05.

*Note.* Two participants identified as transgender were eliminated due to statistical non-significance. One participant did not respond to Theoretical Orientation. One participant did not respond to Personality Type.

*Note.* *N = 131.*
Correlations for All Emotional Intelligence Scores by Personality Dichotomies

With counselor education students’ personality type and EI, only one significant relationship emerged. The Thinking/Feeling dichotomy of personality type was weakly related to Branch Four (i.e., emotional management) of EI ($r = .21, p < .05$). Extraversion/Introversion was very weakly and insignificantly related to overall EI, including Branches One, Two, Three, and Four (i.e., emotional perception, integration, understanding, and management) of EI ($r = .05, .07, -.05, .10, -.08$, respectively, $p > .05$). Sensing/Intuition is also very weakly and insignificantly related to overall EI, including Branches One, Two, Three, and Four (i.e., emotional perception, integration, understanding, and management) of EI ($r = -.02, -.09, -.01, .12, -.09$, respectively, $p < .05$). Thinking/Feeling is very weakly and insignificantly related to overall EI, including Branches One, Two, and Three (i.e., emotional perception, integration, and understanding) of EI ($r = .08, -.04, -.04, .08$, respectively, $p > .05$). Judging/Perceiving also is very weakly and insignificantly related to overall EI, including Branches One, Two, and Four (i.e., emotional perception, integration, and management) of EI ($r = .08, .01, .05, -.00$ respectively, $p > .05$). Finally, Judging/Perceiving is weakly and insignificantly related to Branch Three, emotional understanding of EI ($r = .17, p > .05$, see Table 15).
Table 15

*Correlations for All EI Scores by Personality Dichotomies (N = 133)*

<table>
<thead>
<tr>
<th>Extraversion/Introversion</th>
<th>Sensing/Intuition</th>
<th>Thinking/Feeling</th>
<th>Judging/Perceiving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall EI</td>
<td>.05*</td>
<td>-.02*</td>
<td>.08*</td>
</tr>
<tr>
<td>Branch One</td>
<td>.07</td>
<td>-.09</td>
<td>-.04</td>
</tr>
<tr>
<td>Branch Two</td>
<td>-.05*</td>
<td>-.01*</td>
<td>-.04*</td>
</tr>
<tr>
<td>Branch Three</td>
<td>.10</td>
<td>.12</td>
<td>.08</td>
</tr>
<tr>
<td>Branch Four</td>
<td>-.08</td>
<td>-.09</td>
<td>.21*</td>
</tr>
</tbody>
</table>

*Note.* *p* < .05.

*Note.* One participant did not respond to Personality Type.

*Note.* *N* = 132 due to one participant who did not complete Branch Two questions, which was also not calculated in overall EI.

*Note.* EI = Emotional Intelligence; Branch One (i.e., Emotional Perception); Branch Two (i.e., Emotional Integration); Branch Three (i.e., Emotional Understanding); Branch Four (i.e., Emotional Management).

**Research Question Three**

Do the demographics (i.e., gender, age, race, theoretical orientation), academic experience (i.e., level enrolled in a counselor education program: master’s pre-practicum, master’s practicum/internship, or doctoral; number of coursework hours completed; number of coursework hours completed, and number of years of study completed in counselor education graduate study), and personality type (i.e., JTT™) predict counselor education graduate students’ level of emotional intelligence (i.e., MSCEIT)?
Data Analysis for Overall Emotional Intelligence

As suggested by Tabachnick and Fidell (2013), preliminary analyses were inspected using univariate descriptive statistics for accuracy of input for the first regression in the present research. Missing data were evaluated and deleted. Scatterplots confirmed that the relationship between the dependent variable and independent variables is linear. Pairwise plots were screened for nonlinearity and heteroscedasticity. A univariate and multivariate outlier was identified and deleted. Analysis of collinearity statistics was confirmed as Variance Inflation Factor (VIF) scores were well below 10 and tolerance scores above .2 (see Table 16). Cook’s Distance values were all under 1, confirming that no influential cases rendered the model biased (D_i = .009). As suggested by Tabachnick and Fidell (2013), prior to the analysis in the present research, variables were screened for normality, linearity, and homoscedasticity. The model’s P-P plot confirmed that the values of the residuals are normally distributed. The assumption that residuals were independent, as indicated by the obtained value that was close to 2.0 (Durbin-Watson = 2.107). All assumptions associated with the multiple regression were tested and met.

A stepwise (Backward) regression procedure for including variables in the model was used. The stepwise analysis initially included all 19 predictor variables: (a) gender (female), (b) gender (male), (c) age, (d) race (White), (e) race (Black), (f) race (Hispanic), (g) race (other), (h) theoretical orientation (affective), (i) theoretical orientation (cognitive), (j) theoretical orientation (other), (k) level enrolled in coursework (master’s pre-practicum), (l) level enrolled in coursework (master’s practicum/internship), (m) level enrolled in coursework (doctoral), (n) number of coursework hours completed, (o) number of years completed of graduate study, (p) personality type (Extraversion/Introversion), (q) personality type (Sensing/Intuition), (r) personality type (Thinking/Feeling), and (s) personality type (Judging/Perceiving). In the first
model, four variables were excluded because they did not meet criteria of a $p$ value greater than .10: (a) gender (female), (b) race (white), (c) theoretical orientation (cognitive), and (d) level enrolled in coursework (master’s pre-practicum). Throughout the 12 steps, 11 variables were excluded because each variable had a $p$ value greater than .10: (a) age, (b) race (Hispanic), (c) race (other), (d) theoretical orientation (affective), (e) theoretical orientation (other), (f) level enrolled in coursework (master’s practicum/internship), (g) level enrolled in coursework (doctoral), (h) personality type (Extroversion/Introversion), (i) personality type (Sensing/Intuition), (j) personality type (Thinking/Feeling), and (k) personality type (Judging/Perceiving). In the 12th model, four variables emerged as predictors of overall EI: (a) gender (male), (b) race (Black), (c) number of coursework hours, and (d) number of years of graduate study, which significantly explained 16.8% of the variance for counseling students’ overall EI scores ($R^2 = .168$, $F(4, 122) = 6.141$, $p < .05$, see Table 16). Likewise, the full model was significant, indicating that gender, age, race and number of coursework hours completed predicted EI Branch Two, emotional integration. After examining each predictor in terms of the correlations, race (Black), gender (male), number of coursework hours completed, and number of years of graduate study were significantly correlated to students’ overall EI ($r = -.29$, -.16, .23, -.15, respectively, $p < .05$). For gender, male counseling students’ scores were on average lower than female overall scores ($b = -8.76$). For race, Black students’ scores were on average lower than White students’ scores ($b = -10.20$). For every increase in the number of coursework hours, students’ overall EI scores increased ($b = .23$). For the number of years students completed graduate work, their overall EI scores decreased ($b = -4.71$) points.
Table 16

Regression Analysis for Gender, Race, Coursework Hours, Years of Graduate Study, and Overall EI Scores (N = 127)

<table>
<thead>
<tr>
<th>Model 12</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>SE B</td>
<td>t</td>
<td>p</td>
<td>LB</td>
<td>UB</td>
</tr>
<tr>
<td>(Constant)</td>
<td>110.42</td>
<td>47.52</td>
<td>.00</td>
<td>105.82</td>
<td>115.02</td>
<td></td>
</tr>
<tr>
<td>Gender (Male)</td>
<td>-8.76</td>
<td>-.20</td>
<td>-2.44</td>
<td>.02*</td>
<td>-15.86</td>
<td>-1.65</td>
</tr>
<tr>
<td>Race (Black)</td>
<td>-10.20</td>
<td>-.28</td>
<td>-3.36</td>
<td>.00*</td>
<td>-16.21</td>
<td>-4.19</td>
</tr>
<tr>
<td>Coursework Hours</td>
<td>.23</td>
<td>.37</td>
<td>2.23</td>
<td>.03*</td>
<td>.03</td>
<td>.43 .25</td>
</tr>
<tr>
<td>Years of Graduate Study</td>
<td>-4.71</td>
<td>-.44</td>
<td>-2.69</td>
<td>.01*</td>
<td>-3.18</td>
<td>-1.24 .26</td>
</tr>
</tbody>
</table>

Note. *p < .05.

Note. CI = Confidence Interval, LB = Lower Bound, UB = Upper Bound, CT = Collinearity Tolerance, VIF = Variance Inflation Factor; EI = Emotional Intelligence.

Data Analysis for Branch One: Emotional Perception

As suggested by Tabachnick and Fidell (2013), preliminary analyses were inspected using univariate descriptive statistics for accuracy of input for the second regression in the present research. Missing data were evaluated and deleted. Scatterplots confirmed that the relationship between the dependent variable and independent variables is linear. Pairwise plots were screened for nonlinearity and heteroscedasticity. A univariate and multivariate outlier was identified and deleted. Analysis of collinearity statistics confirmed this assumption was met, as VIF scores were well below 10, and tolerance scores above 0.2 (see Table 17). Cook’s Distance values were all under 1, confirming that no influential cases rendered the model biased (Di =
.007). As suggested by Tabachnick and Fidell (2013), prior to the analysis in the present research, variables were screened for normality, linearity, and homoscedasticity. The model’s P-P plot confirmed that the values of the residuals are normally distributed. The assumption that residuals were independent, as indicated by the obtained value close to 2 (Durbin-Watson = 2.065). All assumptions associated with the multiple regression were tested and met.

A stepwise (Backward) procedure for including variables in the model was used. The stepwise analysis initially included all 19 predictor variables: (a) gender (female), (b) gender (male), (c) age, (d) race (White), (e) race (Black), (f) race (Hispanic), (g) race (other), (h) theoretical orientation (affective), (i) theoretical orientation (cognitive), (j) theoretical orientation (other), (k) level enrolled in coursework (master’s pre-practicum), (l) level enrolled in coursework (master’s practicum/internship), (m) level enrolled in coursework (doctoral), (n) number of coursework hours completed, (o) number of years completed of graduate study, (p) personality type (Extraversion/Introversion), (q) personality type (Sensing/Intuition), (r) personality type (Thinking/Feeling), and (s) personality type (Judging/Perceiving). In the first model, four variables were excluded because they did not meet criteria of a p value greater than .10: (a) gender (female), (b) race (White), (c) theoretical orientation (cognitive), (d) level enrolled in coursework (master’s pre-practicum). Throughout 14 steps, 13 variables: (a) age, (b) race (Black), (c) race (Hispanic), (d) race (other), (e) theoretical orientation (affective), (f) theoretical orientation (other), (g) level enrolled in coursework (master’s practicum/internship), (h) level enrolled in coursework (doctoral), (i) number of coursework hours completed, (j) personality type (Extraversion/Introversion), (k) personality type (Sensing/Intuition), (l) personality type (Thinking/Feeling), and (m) personality type (Judging/Perceiving) were excluded because each variable had a p value greater than .10. In the 14th model, two variables...
emerged as predictors of EI Branch One, emotional perception; gender (male) and number of years of graduate study completed, which significantly explained 6.5% of the variance ($R^2 = .064, F(2, 125) = 4.260, p < .05$, see Table 17). Likewise, the full model was significant, indicating that gender and number of years of graduate study completed predicted EI Branch Two, emotional integration. In examining the predictors in terms of their correlations; gender (male) and the number of years of study completed in counselor education graduate study were significantly correlated to EI Branch One, emotional perception ($r = -.17, -.18$, respectively, $p < .05$). For gender, male counseling students’ scores were on average lower than female emotional perception scores ($b = -7.21$). For the number of years student completed graduate work, their emotional perception scores decreased ($b = -1.93$) points.

Table 17

*Regression Analysis for Gender, Years of Graduate Study, and EI Branch One Scores (N = 128)*

<table>
<thead>
<tr>
<th>Model 14</th>
<th>95 % CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$</td>
</tr>
<tr>
<td>(Constant)</td>
<td>108.27</td>
</tr>
<tr>
<td>Gender (Male)</td>
<td>-7.21</td>
</tr>
<tr>
<td>Years of Graduate Study</td>
<td>-1.93</td>
</tr>
</tbody>
</table>

*Note. *$p < .05$.  

*Note. CI = Confidence Interval, LB = Lower Bound, UB = Upper Bound, CT = Collinearity Tolerance, VIF = Variance Inflation Factor; EI = Emotional Intelligence, Branch One, emotional perception.*
Data Analysis for Branch Two: Emotional Integration

As suggested by Tabachnick and Fidell (2013), preliminary analyses were inspected using univariate descriptive statistics for accuracy of input for the third regression in the present research. Missing data were evaluated and deleted. Scatterplots confirmed that the relationship between the dependent variable and independent variables is linear. Pairwise plots were screened for nonlinearity and heteroscedasticity. A univariate and multivariate outlier was identified and deleted. Variables were screened for multicollinearity and singularity. Analysis of collinearity statistics was confirmed, as VIF scores were well below 10 and tolerance scores above 0.2 (see Table 18). Cook’s Distance values were all under 1, confirming that no influential cases rendered the model biased (D_ı = .009). As suggested by Tabachnick and Fidell (2013), prior to the analysis in the present research, variables were screened for normality, linearity, and homoscedasticity. The model’s P-P plot confirmed that the values of the residuals are normally distributed. The assumption that residuals were independent as the obtained value was close to 2 (Durbin-Watson = 2.065). All assumptions associated with the multiple regression were tested and met.

A stepwise (Backward) procedure for including variables in the model was used. The stepwise analysis initially included all 19 predictor variables: (a) gender (female), (b) gender (male), (c) age, (d) race (White), (e) race (Black), (f) race (Hispanic), (g) race (other), (h) theoretical orientation (affective), (i) theoretical orientation (cognitive), (j) theoretical orientation (other), (k) level enrolled in coursework (master’s pre-practicum), (l) level enrolled in coursework (master’s practicum/internship), (m) level enrolled in coursework (doctoral), (n) number of coursework hours completed, (o) number of years completed of graduate study, (p) personality type (Extraversion/Introversion), (q) personality type (Sensing/Intuition), (r)
personality type (Thinking/Feeling), and (s) personality type (Judging/Perceiving). In the first model, four variables were excluded because they did not meet the criteria of a p value greater than .10: (a) gender (female), (b) race (White), (c) theoretical orientation (cognitive), and (d) level enrolled in coursework (master’s pre-practicum). Throughout 13 steps, 12 variables: (a) race (Hispanic), (b) race (other), (c) theoretical orientation (affective), (d) theoretical orientation (other), (e) level enrolled in coursework (practicum/internship), (f) level enrolled in coursework (doctoral), (g) number of coursework hours completed, (h) number of years of graduate study completed, (i) personality type (Extraversion/Introversion), (j) personality type (Sensing/Intuition), (k) personality type (Thinking/Feeling), and (l) personality type (Judging/Perceiving) were excluded because each variable had a p value greater than .10. In the 13th model, three variables emerged as predictors of emotional integration: (a) gender (male), (b) age, and (c) race (Black), which significantly explained 14.3% of the variance for EI Branch Two, emotional integration scores ($R^2 = .14; F(3, 123) = 6.832, p < .001$, see Table 18). Likewise, the full model was significant, indicating that gender, age, and race predicted EI Branch Two, emotional integration. After examining each predictor in terms of their correlation to EI Branch Two, emotional integration; gender (male), age, and race (Black) were significantly correlated to EI Branch Two, emotional integration ($r = -.17, -.22, -.23$; respectively, $p < .05$, see Table 18). For gender, male counseling students’ scores were on average lower than female emotional integration scores ($b = -8.73$). For age, younger students were more emotionally integrative ($b = -.47$) than older students. For race, Black students’ emotional integration scores were on average lower than White students’ scores ($b = -8.01$).
Table 18

Regression Analysis for Gender, Age, Race, and EI Branch Two Scores (N = 127)

<table>
<thead>
<tr>
<th>Model 13</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
</tr>
<tr>
<td>(Constant)</td>
<td>120.44</td>
</tr>
<tr>
<td>Gender (Male)</td>
<td>-8.73</td>
</tr>
<tr>
<td>Age</td>
<td>- .47</td>
</tr>
<tr>
<td>Race (Black)</td>
<td>-8.01</td>
</tr>
</tbody>
</table>

Note. *p < .05.

Note. CI = Confidence Interval, LB = Lower Bound, UB = Upper Bound, CT = Collinearity Tolerance, VIF = Variance Inflation Factor; EI = Emotional Intelligence, Branch Two, emotional integration.

Data Analysis for Branch Three: Emotional Understanding

As suggested by Tabachnick and Fidell (2013), preliminary analyses were inspected using univariate descriptive statistics for accuracy of input for the fourth regression in the present research. Missing data were evaluated and deleted. Scatterplots confirmed that the relationship between the dependent variable and independent variables is linear. Pairwise plots were screened for nonlinearity and heteroscedasticity. A univariate and multivariate outlier was identified and deleted. Analysis of collinearity statistics confirmed this assumption was met, as VIF scores were well below 10, and tolerance scores above 0.2 (see Table 19). Cook’s Distance values were all under 1, confirming that no influential cases rendered the model biased (Dᵢ = .006). As suggested by Tabachnick and Fidell (2013), prior to the analysis in the present research,
variables were screened for normality, linearity, and homoscedasticity. The model’s P-P plot confirmed that the values of the residuals are normally distributed. The assumption that residuals were independent was met, as the obtained value was close to 2 (Durbin-Watson = 2.196). All assumptions associated with the multiple regression were tested and met. A backward method multiple regression was performed, meaning independent variables that did not contribute to the regression equation were deleted from the model.

A stepwise (Backward) procedure for including variables in the model was used. The stepwise analysis initially included all 19 predictor variables: (a) gender (female), (b) gender (male), (c) age, (d) race (White), (e) race (Black), (f) race (Hispanic), (g) race (other), (h) theoretical orientation (affective), (i) theoretical orientation (cognitive), (j) theoretical orientation (other), (k) level enrolled in coursework (master’s pre-practicum), (l) level enrolled in coursework (master’s practicum/internship), (m) level enrolled in coursework (doctoral), (n) number of coursework hours completed, (o) number of years completed of graduate study, (p) personality type (Extraversion/Introversion), (q) personality type (Sensing/Intuition), (r) personality type (Thinking/Feeling), and (s) personality type (Judging/Perceiving). In the first model, four variables were excluded because they did not meet criteria of a p value greater than .10; (a) gender (female), (b) race (White), (c) theoretical orientation (cognitive), (d) level enrolled in coursework (pre-practicum). Throughout 10 steps, nine variables: (a) gender (male), (b) age, (c) race (other), (d) theoretical orientation (affective), (e) theoretical orientation (other), (f) level enrolled in coursework (master’s practicum/internship), (g) level enrolled in coursework (doctoral), (h) personality type (Sensing/Intuition), and (i) personality type (Thinking/Feeling) were excluded because each variable had a p value greater than .10. In the 10th model, six variables emerged as predictors of Branch Three, emotional understanding: (a) race (Black), (b)
race (Hispanic), (c) number of coursework hours completed, (d) numbers of years of graduate study completed, (e) Extraversion/Introversion (Extraversion), and (f) Judging/Perceiving Perceiving), which significantly explained 30.7% of the variance ($R^2 = .307; F (6, 121) = 8.92, p < .001$) for EI Branch Three, emotional understanding scores. Likewise, the full model was significant, indicating that race, the number of coursework hours completed and years of study completed in counselor education graduate study, Extraversion/Introversion, and Judging/Perceiving predicted EI Branch Three, emotional understanding (see Table 19).

However, after examining each predictor in terms of their correlation to EI Branch Three (i.e., emotional understanding) race (Black) and Judging/Perceiving was significantly correlated to EI Branch Three, emotional understanding ($r = -.44, .167$, respectively, $p < .05$), whereas race (Hispanic), the number of coursework hours completed, years of study completed in counselor education graduate study, and Extraversion/Introversion were not significantly correlated to EI Branch Three, emotional understanding ($r = -.09, -.02, .12, 10$; respectively, $p > .05$). For race, Black and Hispanic students’ emotional understanding scores were on average lower than White students’ scores ($b = -14.56; b = -15.02$, respectively). For every increase in the number of coursework hours completed, students’ emotional understanding scores increased ($b = .25$). For the number of years student completed graduate work, their emotional understanding scores decreased ($b = -3.70$) points. For Introversion/Extraversion, students who identified with Introversion ($b = 5.04$) were more emotionally understanding than students who identified with Extraversion. For Judging/Perceiving students who identified with Perceiving ($b = 6.71$) were more emotionally understanding than students who identified with Judging.
Table 19

Regression Analysis for Race, Coursework Hours, Years of Graduate Study, E/I, J/P, and EI Branch Three Scores (N = 128)

<table>
<thead>
<tr>
<th>Model 10</th>
<th>b</th>
<th>SE B</th>
<th>t</th>
<th>p</th>
<th>LB</th>
<th>UB</th>
<th>CT</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>102.65</td>
<td>40.18</td>
<td>.00</td>
<td>97.60</td>
<td>107.71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race (Black)</td>
<td>-14.56</td>
<td>-.43</td>
<td>-5.63</td>
<td>.00**</td>
<td>-19.68</td>
<td>-9.44</td>
<td>.97</td>
<td>1.04</td>
</tr>
<tr>
<td>Race (Hispanic)</td>
<td>-15.02</td>
<td>-.14</td>
<td>-1.85</td>
<td>.07</td>
<td>-31.11</td>
<td>1.08</td>
<td>.95</td>
<td>1.05</td>
</tr>
<tr>
<td>Coursework Hours</td>
<td>.25</td>
<td>.42</td>
<td>2.80</td>
<td>.01*</td>
<td>.07</td>
<td>.42</td>
<td>.25</td>
<td>4.00</td>
</tr>
<tr>
<td>Years of Graduate Study</td>
<td>-3.70</td>
<td>-.37</td>
<td>-2.46</td>
<td>.02*</td>
<td>-6.60</td>
<td>-.72</td>
<td>.25</td>
<td>3.95</td>
</tr>
<tr>
<td>E/I (Introversion)</td>
<td>5.04</td>
<td>.15</td>
<td>2.00</td>
<td>.5</td>
<td>-.05</td>
<td>10.14</td>
<td>.93</td>
<td>4.00</td>
</tr>
<tr>
<td>J/P (Perceiving)</td>
<td>6.71</td>
<td>.19</td>
<td>2.45</td>
<td>.02*</td>
<td>1.29</td>
<td>12.12</td>
<td>.95</td>
<td>1.05</td>
</tr>
</tbody>
</table>

*Note. **p < .05; *p < .001.

Note. CI = Confidence Interval, LB = Lower Bound, UB = Upper Bound, CT = Collinearity Tolerance, VIF = Variance Intolerance Factor; E/I = Extraversion/Introversion, J/P = Judging/Perceiving, EI = Emotional Intelligence, Branch Three, emotional understanding.

Data Analysis for Branch Four: Emotional Management

As suggested by Tabachnick and Fidell (2013), preliminary analyses were inspected using univariate descriptive statistics for accuracy of input for the fifth regression in the present research. Missing data were evaluated and deleted. Scatterplots confirmed that the relationship between the dependent variable and independent variables is linear. Pairwise plots were screened...
for nonlinearity and heteroscedasticity. A univariate and multivariate outlier was identified and deleted. Analysis of collinearity statistics confirmed this assumption was met, as VIF scores were well below 10, and tolerance scores above 0.2 (see Table 20). Cook’s Distance values were all under 1, confirming that no influential cases rendered the model biased ($\text{Di} = .009$). As suggested by Tabachnick and Fidell (2013), prior to the analysis in the present research, variables were screened for normality, linearity, and homoscedasticity. The model’s P-P plot confirmed that the values of the residuals are normally distributed. The assumption that residuals were independent was met, as the obtained value was close to 2 (Durbin-Watson = 2.109). All assumptions associated with the multiple regression were tested and met. A backward method multiple regression was performed, meaning independent variables that did not contribute to the regression equation were deleted from the model.

A stepwise (Backward) procedure for including variables in the model was used. The stepwise analysis initially included all 19 predictor variables: (a) gender (female), (b) gender (male), (c) age, (d) race (White), (e) race (Black), (f) race (Hispanic), (g) race (other), (h) theoretical orientation (affective), (i) theoretical orientation (cognitive), (j) theoretical orientation (other), (k) level enrolled in coursework (master’s pre-practicum), (l) level enrolled in coursework (master’s practicum/internship), (m) level enrolled in coursework (doctoral), (n) number of coursework hours completed, (o) number of years completed of graduate study, (p) personality type (Extraversion/Introversion), (q) personality type (Sensing/Intuition), (r) personality type (Thinking/Feeling), and (s) personality type (Judging/Perceiving). In the first model, four variables were excluded because they did not meet criteria of a $p$ value greater than 10; (a) gender (female), (b) race (White), (c) theoretical orientation (cognitive), (d) level enrolled in coursework (master’s pre-practicum). Throughout 14 steps, 13 variables were excluded.
because each variable had a p value greater than .10: (a) gender (male), (b) race (Black), (c) race (Hispanic), (d) race (other), (e) theoretical orientation (affective), (f) theoretical orientation (other), (g) level enrolled in coursework (master’s practicum/internship), (h) level enrolled in coursework (doctoral), (i) number of coursework hours completed, (j) number of years of graduate study completed, (k) personality types (Extraversion/Introversion), (l) personality type (Sensing/Intuition), and (m) personality type (Judging/Perceiving). In the 14th model, two variables emerged as predictors of Branch Four, emotional management: age and Thinking/Feeling (Feeling), which significantly explained 6.9% of the variance ($R^2 = .069$, $F (2, 125) = 4.628$, $p < .05$). After examining the predictors in terms of their correlations to EI Branch Four (i.e., emotional management), age and Thinking/Feeling personality type were significantly correlated to EI Branch Four, emotional management ($r = -.15, .22$; respectively, $p < .05$, see Table 20). For age, younger students had higher scores in emotional management ($b = -.28$) than older students. For Thinking/Feeling, students who identified with a Feeling personality type ($b = 8.35$) were more skilled at emotional management than students who identified with a Thinking personality type.
Table 20

*Regression Analysis for Age, Thinking/Feeling, and EI Branch Four Scores (N=128)*

<table>
<thead>
<tr>
<th>Model 14</th>
<th>95 % CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$</td>
</tr>
<tr>
<td>(Constant)</td>
<td>103.97</td>
</tr>
<tr>
<td>Age</td>
<td>-.28</td>
</tr>
<tr>
<td>T/F (Feeling)</td>
<td>8.35</td>
</tr>
</tbody>
</table>

*Note.* *$p < .05$.*

*Note.* T/F = Thinking/Feeling personality type subscale, CI = Confidence Interval, LB = Lower Bound, UB = Upper Bound, CT = Collinearity Tolerance, VIF = Variance Intolerance Factor; EI = Emotional Intelligence, Branch Four, emotional *management*.

**Summary**

In this chapter, three research questions about the relationship between counselor education graduate students’ EI and personality types were answered. For research question one, descriptive statistics for counselor education graduate students’ demographics of gender, age, race, and theoretical orientation were provided. In addition, descriptive statistics for students’ academic experience, EI scores, and personality types were provided. For research question two, weak, significant correlations were found between students’ EI Branches One and Two (i.e., emotional *perception, integration*) scores. Students’ race and EI (i.e., overall and Branches Two and Three, emotional *integration, management*) scores were significant and weakly correlated. Students’ age was significant and weakly correlated to their EI Branch Two, emotional *integration* scores. Weak non-significant correlations were found for students’ academic
experience, EI scores, and personality type. Students’ theoretical orientation was significant and weakly correlated to their EI Branch Three, emotional understanding scores. Students’ gender was significant and very weakly correlated with the Implementation dichotomy (i.e., Judging/Perceiving) of personality types. Students’ theoretical orientation was significant and weakly correlated with the Perception dichotomy (i.e., Sensing/Intuition) of personality types. “Other” as a theoretical orientation was significant and weakly correlated with the General Attitude dichotomy (i.e., Extraversion/Introversion) dichotomy of personality types.

For research question three, a multiple regression analysis indicated that counselor education graduate students’ race, gender, number of coursework hours completed, and number of years of graduate study completed significantly explained 16.8% of the variance for students’ overall EI scores. A second multiple regression analysis indicated that students’ gender and number of years of graduate study completed significantly explained 6.5% of the variance for their EI Branch One, emotional perception scores. A third multiple regression analysis indicated that students’ age, race and gender explained 14.3% of variance for their EI Branch Two, emotional integration scores. A fourth multiple regression analysis indicated that students’ race, number of coursework hours completed, and number of years of graduate study completed. General Attitude dichotomy (i.e., Extraversion/Introversion), and Implementation dichotomy (i.e., Judging/Perceiving) of personality types significantly explained 30.7% of variance in students’ EI Branch Three, emotional understanding scores. A final multiple regression indicated that students’ age and the Process dichotomy (i.e., Thinking/Feeling) of personality type explained 4.6% of variance in their EI Branch Four, emotional management scores.
Chapter V

Discussion

In the present research, the relationship between counseling students’ demographics (i.e., gender, age, race, and theoretical orientation), academic experience (i.e., level enrolled in a counseling graduate program, number of graduate coursework hours completed, and number of years of graduate study completed), level of EI (as measured by the MSCEIT), and personality type (as measured by the JTT™) were examined. Correlations and multiple regressions were conducted to determine which variables emerged as predictors of EI. In this chapter, the results of the research are summarized and examined in the context of existing research. Also, implications for counseling students, counselors, and counselor educators are presented. Limitations and recommendations for future research are included and a conclusion is provided.

Discussion of Research Findings

The purpose of the present research was to examine the relationship between counseling students’ demographics, EI and personality type. During in-classroom presentations conducted by the researcher, assessments that measured EI (i.e., MSCEIT) and personality type (i.e., JTT™) as well as a Demographic Survey were completed online by 134 counseling students from southern Louisiana and southern Texas CACREP accredited programs. In the present research, differences and relationships were found in counseling students’ demographics; gender, age, race, and theoretical orientation, as well as their academics, EI and personality types.

Level of Emotional Intelligence and Demographics

In the present research, the findings indicated that counseling students were less emotionally intelligent than psychology doctoral students (Barbash, 2015) as indicated by counseling students’ mean scores of overall EI. Also, counseling students were more emotionally
intelligent than medical students (Todres et al., 2010) in overall EI as well as emotional perception and management of EI. However, medical students had higher emotional understanding than counseling students. In a third and fourth comparison, counseling students were more emotionally intelligent than undergraduate business students (Rode et al., 2007) and school psychology graduate students (Grehan et al., 2011). Counseling students were also more emotionally intelligent than a diverse community sample from Goldenberg et al.’s (2006) research with adults and the impact of EI on their life experiences (e.g., life stressors).

**Gender to Emotional Intelligence**

Counseling students’ gender was negatively and significantly linked to their emotional perception and integration, which is consistent with the literature that women are more emotionally intelligent than men (Brackett et al., 2003; Goldenberg et al., 2006; Hampel, 2002; Joseph & Newman, 2010; Martines et al., 2006; Mayer et al., 1999; Mayer & Geher, 1996; Todres et al., 2010). Female counseling students were more emotionally intelligent than males in emotional perception, integration, management, and overall EI. However, male counseling students were more emotionally understanding than female counseling students.

**Age to Emotional Intelligence**

Counseling students’ age was negatively and significantly related to emotional integration and management, indicating that older counseling students are less emotionally integrative and less skilled at emotional management than younger counseling students. In general, the present findings on age and EI conflicts with previous research that indicated overall EI increases with age (Bhullar et al., 2012; Mayer et al., 1999). Also, the present findings on counseling students’ age and EI differed than Todres et al.’s (2010) research that medical students under the age of 25 were less emotionally understanding and less skilled at emotional
management than students over the age of 25. However, Todres et al.’s (2010) research regarding emotional integration indicated no significant relationship with medical students’ age.

**Race to Emotional Intelligence**

Counseling students’ race was significantly but weak and negatively related to their emotional integration and understanding, and overall EI. Specifically, Black counseling students were less emotionally integrative and understanding as well as overall less emotionally intelligent than White, American Indian, Asian, Native Hawaiian, Pacific Islander, and Biracial counseling students. Using a different EI instrument than the MSCEIT, the 16-item Wong and Law Emotional Intelligence Scale (WLEIS); Whitman et al. (2014) also reported group differences in race and EI, with White firefighter job applicants being more emotionally intelligent than Black applicants. However, Gignac and Ekermans (2010) found that Black South African employees scored significantly higher on EI than White South African employees. Similarly, Van Rooy et al. (2005) found that Black undergraduate psychology students were more emotionally intelligent than White undergraduate psychology students. Also, in Schutte et al.’s (1998) research, Black psychology students scored one-third of a standard deviation above White students, whereas Hispanic students scored a half-standard deviation above White students on a trait EI assessment.

Van Rooy et al. (2005) suggested that culture impacts individuals’ EI with Hispanics in that they may be more emotionally intelligent due to their collectivistic culture, where emotion is taught and modeled as a tool in social settings. Bhullar et al.’s (2012) found that individuals living in collectivistic cultures were more emotionally intelligent and more likely to have higher emotional functioning than individuals living in individualistic cultures. Using the Trait Meta-Mood Scale (TMMS), Martines et al. (2006) found differences in EI of Americans and Mexicans...
where Mexicans scored lower on attention and clarification of emotions than Latino Americans, whereas White Americans scored higher on attention to emotions, which the authors believed may be explained by the United States’ individualistic culture. The present research findings indicated that Hispanics were less emotionally *understanding* than White, American Indian, Asian, Native Hawaiian, Pacific Islander, and Biracial counseling students.

**Theoretical Orientation to Emotional Intelligence**

No research was found related to counseling students’ theoretical orientation and EI, however, in the present research findings, counseling students’ theoretical orientation was significantly related to their emotional *understanding*; students with an affective theory (i.e., psychoanalytic, systems, person-centered, Gestalt, existential, attachment, post-modern, and feminist) were more emotionally *understanding* than students with a cognitive theory (i.e., cognitive/behavioral, solution-focused, acceptance and commitment, REBT, evolutionary psychology, narrative, choice, and Adlerian) as well as those students who were undecided or integrative in their theoretical orientation. Also, counseling students who reported having an affective theory had a higher level of emotional *understanding* than students who reported having a cognitive theory, which may indicate that counselors who understand emotions are drawn toward affective theories. In contrast, counseling students’ theoretical orientation was not significantly related to their emotional *perception, integration, management*, and overall EI, which may indicate that counseling students’ theory is not a predictor of their EI.

**Academics to Emotional Intelligence**

Counseling students’ overall EI, and emotional *perception and understanding* were significantly related to the number of their coursework hours completed and years of graduate study completed. Although, significant correlations for student’ overall EI and all four branches
of EI as well as their level enrolled in a counselor education program, number of coursework hours completed, and number of years of graduate study completed were not found, the number of coursework hours completed and years of graduate study completed did account for the variance in students’ overall EI as well as emotional perception and understanding. The significant findings for the relationship between counseling students’ number of years of graduate study completed and EI conflicted with Barbash’s (2015) and Todres’s et al. (2010) findings that students’ overall EI and emotional management increased with the number of years of graduate study completed in a psychology doctoral program and medical school program. However, counseling students who completed more coursework hours and were more emotionally intelligent in their overall EI and emotional understanding than students with fewer coursework hours completed is consistent with Barbash’s (2015) and Todres et al. ’s (2010) findings that students’ EI increases with the number of coursework hours accrued, assuming that the number of coursework hours increases with each year of psychology and medical graduate study. Thus, students who took longer to complete their graduate programs may be less emotionally intelligent than those who completed more coursework hours during a shorter time period in their graduate studies. Additionally, counseling students may differ from psychology doctoral and medical students in that counseling students’ EI does not increase with the number of years of graduate study.

Although in the present research, a significant relationship was not found between level of enrollment and EI, which implies a degree of clinical experience, and EI, other studies indicated that counselors with less clinical experience scored higher on EI than counselors with greater clinical experience. Rieck et al. (2015) found that doctoral psychology clinician trainees’
EI was higher than their psychologist supervisors. In another study on trainee psychologists, “early” trainees scored slightly higher on EI than “established” trainees (p. 46).

Gender and Academics to Emotional Intelligence

For gender and number of years of graduate study, the score variance in counseling students’ emotional *perception* suggested that female counseling students with fewer years of graduate study were more emotionally *perceptive* than males with more years of graduate study, which is partly congruent with Chew et al.’s (2013) research, that female, non-Malaysian medical students were more emotionally intelligent overall and scored better on their final examination than male, Malaysian medical students. However, Chew et al. (2013) said that both female and male students with more years of graduate study did better on their final examination than students enrolled in their first year.

Gender, Age, and Race to Emotional Intelligence

For gender, age, and race; the score variance in counseling students’ emotional *integration* indicated that male Black students who were younger were less emotionally *integrative* than female White, Hispanic, American Indian or Alaska Native, Asian, Native Hawaiian, and Biracial students who were older. Similarly, Todres et al. (2010) found that female, White medical students were more emotionally intelligent than male, non-white students. However, the authors found that students who were 25 years old or older were more overall emotionally intelligent than students younger than 25. Van Rooy et al. (2005) also found that male undergraduate psychology students were less emotionally intelligent than female undergraduate psychology students and that older students were more emotionally intelligent than younger students, which is consistent with Todres et al.’s (2010) findings. Unlike the
present study, minority students (i.e., Hispanics and Blacks) were more emotionally intelligent than White students (Van Rooy et al., 2005).

**Gender, Race, and Academics to Emotional Intelligence**

For gender, race, and academics (i.e., number of coursework hours completed and number of years of graduate study completed), the score variance in counseling students’ overall EI indicated that male Black counseling students who had more years of graduate study completed and less coursework hours completed were lower in overall EI than female, White, Hispanic, American Indian or Alaska Native, Asian, Native Hawaiian, and Biracial students who had less years of graduate study and more coursework completed. In similar research by Todres et al. (2010), the score variance in medical students’ emotional *perception* indicated that White female students were more emotionally *perceptive* than non-white, male students. Also, White medical students were more emotionally *understanding* than non-white students. The only predictor in their study for emotional *management* was level of study, which indicated final year medical students *managed* emotion better than first-year or second-year students.

**Personality Types**

Counseling students’ most predominant personality type was INFJ, followed by ENFJ. INFJ types are serious, insightful, quietly forceful, and people-oriented individuals who are interested in helping others for the common good (Baptista, 2009). Whereas, ENFJ types are sociable, expressive, opinionated, orderly, and conscientious individuals who are open to new ideas and possibilities (Baptista, 2009). Keirsey (1998) described INFJ personality type counselors as being private, emphatic, harmonious, quietly passionate, spiritually and connected individuals who are concerned with personal growth. In research by Robbin and Turley (2016), they also found that INFJ individuals were the most predominant personality type with person-
centered counselors. However, in research conducted on the general population in the United States, INFJ individuals are the least common personality type (Center for Applications of Psychological Type, 2003).

**Gender to Personality Types**

For gender and personality types, significant relationships were found for female counseling students and Judging/Perceiving personality types; whereas, no significant relationship was found with male counseling students and Judging/Perceiving types. Female counseling students were more likely to identify as a Judging personality type. In comparison to the literature, in the present research finding, gender was only significantly related to Thinking/Feeling personality types (Myers & Kirby, 1994). A possible explanation by Myers and Myers (1980) is that in Western societies, women are socialized toward a Feeling personality type, whereas men are socialized toward a Thinking personality type.

**Age and Personality Types to Emotional Intelligence**

For age, younger Feeling type counseling students indicated higher levels of managing their emotions than older Thinking type counseling students. Specific to age, previous research indicated that age was positively related to EI (Bhullar et al., 2012; Mayer et al., 1999; Van Rooy et al, 2005); whereas, in the present research, younger counseling students were more emotionally intelligent than older counseling students. Also, counseling students’ Thinking/Feeling personality types were significantly related to their emotional management, which is consistent with Malik and Zamir’s (2014) research that Feeling type individuals were more emotionally intelligent than Thinking type individuals. Kennedy and Kennedy (2004) described how Feeling type individuals prioritize emotions and derive more meaning from their relationships in comparison to Thinking type individuals. As defined by Mayer and Salovey
(1997), emotional management assists individuals in regulating their emotions, thus Feeling type individuals tend to prioritize their emotions, which contributes to their level of mastery of emotional management, in comparison to Thinking type individuals who are more versed in logic.

**Race, Academics, and Personality Types to Emotional Intelligence**

For race and academics, the score variance in counseling students’ emotional understanding indicated that Black, Hispanic, Extraverted, and Judging type students with more years of graduate study completed and less coursework hours completed were less emotionally understanding than White, American Indian or Alaska Native, Asian, Native Hawaiian, and Biracial and Introverted and Perceiving students, with less years of graduate study completed and more coursework hours completed. Todres et al. (2010) found that Asian medical students were less emotionally understanding and were less skilled at managing emotions than White medical students. The authors suggested that the visual and linguistic specificity of the MSCEIT items explained the group differences in Asian and White medical students’ EI, which may favor majority ethnic respondents. Wass et al. (2003) echoed this same concern, suggesting that some MSCEIT sections more accurately measure language comprehension, rather than EI. The tendency for North American culture to emphasize positive emotions and suppress negative emotions more than in Asian societies may also explain the differences in EI (Bhullar et al., 2012; Kitayama et al., 2000).

In additional research, Malik and Zamir (2014) found that Introverted university students were more emotionally intelligent than Extraverted students. In contrast, Baptista’s (2009) found that investment bank job applicants who were Extraverts were more emotionally intelligent than Introvert applicants. Baptista (2009) attributed Extraverts’ high EI to their tendency to be drawn
to their external environment, which may contribute to their development of superior coping skills. Higgs (2001) also found that Extravert personality types were positively related to EI, suggesting that Extraversion personality types correlate with tenets of EI as defined by the mixed model: influence, intuitive decision making, and motivation. Baptista (2009) also found that individuals who identified as Judging personality types were more emotionally intelligent than Perceiving personality types. Judging individuals are described as decisive and organized, which may factor into their ability to understand emotions accurately.

**Theoretical Orientation to Personality Types**

For theoretical orientation, the majority of counseling students with both affective and cognitive theoretical orientations tended to identify as Intuitive as opposed to Sensing personality types (i.e., how an individual perceives information via the five senses), which indicated that they prioritize possibilities and potential experiences and meanings of relationships; rather than preferring facts and realities of life (Lawrence, 1993). Thus, counselors who are intuitive would prioritize the therapeutic alliance, which is relational in nature. Also, a common goal of counseling is to improve quality of life for clients, thus counselors’ tendency would be to value an individual’s potential (Scheel et al., 2012). Counseling students with both theoretical orientations and an Intuitive personality in contrast with Varlami and Bayne’s (2007) research that counselors’ Sensing type personalities who had a cognitive-behavioral theoretical orientation was related. However, Varlami and Bayne (2007) also found that counselors who identified as a psychodynamic tended to be Intuitive, specifically ENFJ. Dodd and Bayne (2006) also found a preference for Intuition amongst psychodynamic counselors, although the majority of psychodynamic counselors identified as INFJ. According to Myers and Kirby (1994), both INFJs and ENFJs tend to enjoy elaborate conceptualizations which stem from rich inner lives. In the
present research, counseling students’ most common personality type was INFJ with both affective and cognitive theoretical orientations, followed by ENFJ.

The present research failed to replicate similar findings to prior research (Churchill & Bayne, 1998; Erikson, 1993; Dodd & Bayne, 2006; McBride & Martin, 1998; Robbins & Turley, 2016) regarding Thinking type counselors who practiced cognitive theoretical orientations and Feeling type counselors who practiced affective theoretical orientations. In the present research Thinking or Feeling personality types were not related to their theoretical orientations. Although, all eight counseling students who were undecided or integrative in their theoretical orientations also identified as Introverted. Khalil (2016) suggested that Introverted individuals rely on their personal values and tend to be slower at decision making than Extraverted individuals. In the present research, students who reported as Introverts preferred slow decision making, which may explain why counseling students who reported undecided and integrative theoretical orientations also identified as Introverted. Thus, Introverted counseling students would be less likely to make a quick or final decision and content to be undecided about their theoretical orientations, rather than select a theory they may not yet fully understand or embrace.

**Implications**

In the present section, several implications for counseling students, counselor educators, and counselors are provided that include counseling students’ EI as it relates to their age, gender, race, theoretical orientation, and personality types.

**Implications for Counseling Students and Counselors**

In the present research, results of extensive data analysis provided several implications. The first implication is the need for counseling students and counselors to assess their level of EI that might identify possible emotional growth areas for themselves, with the intent to expand
their capacity and understanding of EI. As indicated by previous research and the findings from the present research, counseling students and counselors are generally more emotionally intelligent than other professionals; such as medical, business, and school psychology professionals. Thus, it is important for counselors to be aware that the concept of EI is consistent with their professional identity. Counselors’ high level of EI can be a strength when counseling clients and can be utilized to build rapport and appropriately identify clients’ emotions during counseling sessions.

Another implication from the present research is the findings that an INFJ personality type emerged as the dominant type for counseling students, however, an INFJ personality type is not representative of the majority of the general population of people. Since INFJ represents only 2% of the American population (Myers et al., 2003), the possibility of counselors’ and students’ personality types differing from their clients’ personality types may occur. Thus, self-awareness of personality types of students and counselors can provide insight into how their perspectives as well as their clients’ perspectives are similar and different. Also, since the majority of personality types indicated in the present research was INFJ or ENFJ, an implication for counselors and students is to understand the NFJ portion of both personality types. Myers and Kirby (1994) stated that INFJs and ENFJs tend to enjoy creative and complex inner lives. For example, an active imagination can generate intricate case conceptualizations. Also, it is possible that Intuitive (i.e., N) counselors and students employ their inherent strengths of emotional perception, like assessing clients’ emotions through their facial expression or nonverbal communication, which can assist counselors and students in successfully facilitating the counseling process. Whereas, Sensing type counselors and students may tend to what Higgs (2001) referred to as undervaluing possibilities, preferring current reality. Thus, when drafting
case conceptualizations and treatment plans, Sensing counselors and students may focus on clients’ potential.

Additionally, counselors and students should be knowledgeable about the gender differences found in EI. In the present research, male counseling students were less overall emotionally intelligent as well as less emotionally perceptive and integrative. It is important for male counselors and male students, in particular, to be aware of their level of emotional perception and integration as well as overall EI. For example, male counselors could improve their emotional perception by intentionally assessing the emotional content in the environment, music, and visual arts (Mayer et al., 2016). Also, male counselors could become more emotionally integrative by checking in with their current emotional state when conceptualizing a client’s case.

In the present research, counseling students who reported both cognitive and affective theoretical orientations chose an Intuition over Sensing personality type. Thus, an implication is that students’ preference for an Intuitive personality type, they may be more interested in the potential or possibilities of clients over Sensing personality type students who would be more interested in clients’ present state of reality. Being more intuitive as a counselor is consistent with the overall theme of counseling that a purposeful conversation can promote personal growth by helping clients overcome current circumstances. Also, counseling students’ shared preference for an Intuition personality type may explain their desire to seek the helping profession of counseling, which is consistent with what Myers and Myers (1980) believe is an Intuition personality type. Intuitive counselors and students would want to assist clients with their potential, which can be used to empower clients.
In the present research finding, Feeling type counseling students excelled at emotional management. An implication is that Thinking type counseling students and counselors may need to increase their emotional management. According to Mayer et al. (2008), emotional management may be increased by being open to feelings, regulating emotions, and being aware of the emotional climate while focusing on a desired outcome. Counseling students and counselors should seek supervision and consultation to receive specific feedback on their ability to master emotional management, but also including an emphasis on all EI branches, which could ultimately contribute to their improved level of emotional management.

Another implication for counseling students and counselors is to be knowledgeable about the gender differences found in the Implementation personality dichotomy. Based on the present research, female counseling students are more likely to identify as a Judging personality type in comparison to males. Thus, it is possible that female counseling students and counselors are inclined to be more structured in sessions, preferring organization, and planning rather than improvisation. Counseling students and counselors who are a Judging personality type may excel at session management by keeping timely appointments and schedules, whereas counselors and students who are a Perceiving type should evaluate how session management is conducted and consider changes to increase efficiency, despite possible resistance to structure and planning.

**Implications for Counselor Educators**

In the present research, younger counseling students were found to be more emotionally integrative and more skilled at emotional management than older counseling students. Based on the present research findings, an implication for counselor educators is that they should emphasize the need for increased self-awareness of emotional integration and emotional management in non-traditional students; students enrolled higher education over the age of 25.
Counselor educators should promote students’ understanding and utilization of EI in their coursework as related to themselves as well as clients. Also, counselor educators could incorporate EI into the curriculum such as Counseling Techniques and Multicultural coursework, as well as Practicum and Internship supervision groups. Counselor educators could assign case studies to students to conceptualize clients through the lens of emotional integration. Also, counselor educators could encourage students to be conscious of their own emotions and subsequent actions during counseling sessions.

Another implication for counselor educators is the difference found between Black and White counseling students’ overall EI and emotional integration and understanding found in the present research. Performance-based ability measures of EI, like the MSCEIT, have shown that the largest group differences favor White participants level of EI (Joseph & Newman, 2010) and that the MSCEIT was normed on a homogenous group of White males educated at prestigious universities (Mayer et al., 2002). Because the MSCEIT is a performance-based ability assessment of EI, the MSCEIT may reflect more of a cognitive ability. Also, because group differences in IQ can be attributed to environmental disadvantages (Nisbett et al., 2012), environment may contribute to individuals’ EI scores. Joseph and Newman (2010) noted that because a lack of research on race and EI exists, “Race results should be interpreted with caution and should serve as a call for future EI researchers to report race differences in their measures” (p. 68), which counselor educators should be aware of when teaching students about EI.

Another implication based on the present research is the importance for counselor educators to understand the relationship between counseling students’ theoretical orientation and their EI. In the present research findings, students with an affective theoretical orientation were more emotionally understanding than students with a cognitive theoretical orientation or those
who were undecided or integrative in their theoretical orientations, which may be due to their focus on experiential and relational approaches to emotion with clients. Thus, counselor educators should instruct students with a cognitive or other type of theoretical orientations to consider integrating emotional knowledge when conceptualizing clients and when developing treatment plans in order to increase students’ own level of emotional understanding. It is possible that students’ level of EI may influence their choice in theoretical orientation. If EI does impact students’ choice of theoretical orientation, then counselor educators should consider assessing students’ EI as a precursor in their journey to select a theoretical orientation. Also, counselor educators should incorporate information about personality types when teaching and mentoring students about theoretical orientations. Based on the present research, all students who were undecided or integrative in their theoretical orientation also identified with Introversion. Counseling students who are Introverts may be as Khalil (2016) described as cautious in their decision making, which may explain students’ undecided or integrative theoretical orientations, due to their delayed decision-making or propensity to avoid a singular, final decision.

Another implication is for counselor educators to be aware that Introverted counseling students are more emotionally understanding than Extraverted students, which may be attributed to Introverted students’ tendency to focus their psychological energy internally, allowing for more listening and observation of others’ emotions. Counselor educators should encourage Extraverted students to incorporate emotional understanding into their case conceptualizations of clients. Counselor educators could facilitate class discussions and assign reflection papers that focus on emotional understanding in order for students to recognize their own emotions as well as others’ emotions (Mayer & Salovey, 1997).
Limitations

There were several limitations in the present research regarding the design and the data collection. The first limitation was the use of a convenience sample. Universities in southern Louisiana and Texas were chosen because they were accessible and cooperative in the research participant recruitment process. Thus, the present research captures the EI and personality types of counseling students in one specific area of the United States, therefore the results may not be generalizability of American counseling students.

A second limitation is the cross-sectional design, which purports data from one moment in time. Thus, the research compared the EI between groups of counseling students; however the possible change in EI in individual students was not assessed. The decision not to pursue a longitudinal research study, which would measure changes in participants’ EI over time, was due to a limit of time and resources.

A third limitation was the length of time the assessments (i.e., Demographic Survey, MSCEIT, and JTT™) took the counseling students to complete. In-classroom presentations, took approximately 1 to 1.5 hours and were limited due to professors’ concern over the possible amount of classroom time missed, which frequently stemmed from the trend of universities moving to a mixed format of in-classroom teaching and online curriculum. Some counseling students reported feeling fatigued by the length of assessments, which may have led to a failure of completion.

The final limitation was due to participation being voluntary in nature, which may have attracted more emotionally intelligent students who were already familiar or invested in the topics of EI or personality type. Several students reported having already completed a similar personality type test, which possibly led to their expectation of identifying as a specific
personality type. Also, a great deal of literature, both in academia and commercial literature about EI may have colored counseling students’ expectations of EI. Finally, the sample size of counseling students may not represent all master’s and doctoral students enrolled in CACREP counseling programs.

**Recommendations for Future Research**

Prior to the present research, examining EI in counseling students was limited. The current research provided several avenues for future researchers to explore. First, future researchers should explore the reasons why gender differences are found in EI of counselors. More research is needed to understand why female counseling students score higher on objective EI assessments than males. A qualitative research approach examining gender differences in EI should be conducted. Also, future research could explore what females’ and males’ perceptions of EI are, and if they feel the assessment used accurately captures their own view of their EI.

Second, more research is needed on the relationship between age and EI of counselors. Younger counseling students were found to be more emotionally integrative and more skilled at emotional management than older counseling students. A higher level of emotional integration amongst younger counseling students raises questions about generational views on incorporating emotion into thought as well as managing emotions. Also, research on age and EI of licensed professional counselors should be conducted, possibly capturing a broader age range and more experienced counselors. A qualitative research design could examine the reasons why age and more experience are linked to EI.

A third recommendation points to race differences found in EI, which raises questions about the multicultural validity of the MSCEIT. Further research should examine why Black counseling students scored lower on the MSCEIT than White, Hispanic, or students from other
races. A case study of a Black counseling student’s thoughts on EI and the MSCEIT may prove informative. Also, researchers could explore counselors’ knowledge of EI prior to taking the MSCEIT and what their EI scores are after taking the MSCEIT. In general, certain ethnic groups may be more familiar with EI, therefore their knowledge may contribute to higher scores on their EI assessments.

A fourth recommendation for future research should be on the relationship between counselors’ academic experience and EI. The present research did not replicate the findings of Barbash’s (2015) study that documented an increase in counseling students’ EI with academic experience or clinical experience. However, the present research and Rieck et al.’s (2015) research did indicate counselors with less clinical experience were more emotionally intelligent than more experienced counselors. Researchers should explore the possible bias experienced counselors bring to the MSCEIT, which is an assessment designed for the general population, and not specific to mental health practitioners. Also, the impact of a CACREP curriculum could be examined regarding EI of counseling students and graduates of CACREP counseling programs. Future researchers should consider conducting a longitudinal research study that compares participants’ EI prior to and after completing CACREP counseling graduate programs.

A fifth recommendation would be to explore the possible impact personality preferences have on counselors’ therapeutic process as well as treatment outcomes with clients. Understanding counselors’ personality types as they relate to effective treatment outcomes would contribute to additional research on the topic of counselor personalities and client treatment. For example, future researchers could explore whether or not a positive therapeutic alliance is linked to a congruence between a therapist’s and client’s personality types. Also, more research is needed on the relationships between counselors’ theoretical orientation, EI, and personality
types. A qualitative approach could examine why counseling students who use affective theories understand emotions better than students who use cognitive, undecided, or integrative theories.

Finally, a sixth recommendation would be to assess for other variables that may help explain the variance in EI scores. It is possible that relationship status, attachment style, cultural background (i.e., individualistic or collectivistic), socioeconomic status, or counseling experience could impact an individual’s level of EI. Future researchers should explore the possible relationship between the above variables and EI.

**Conclusions**

Based on the results from the present research, the relationships between counseling students’ demographics, academic experience, EI, and personality type were provided. Group differences were found in students’ EI concerning gender, age, race, and theoretical orientation. Females were more overall emotionally intelligent, emotionally perceptive, and integrative. Contrary to most research, younger counseling students were more emotionally integrative and more skilled at emotional management than older students. Race was significantly related to overall EI, emotional integration and understanding. Counseling students with affective theoretical orientations were more emotionally understanding than students with cognitive theoretical orientations. Students from both cognitive and affective theoretical orientations preferred Intuition as a personality type. Students who were undecided or integrative in their theoretical orientations preferred an Introversion personality type. Introverted, Perceiving counseling students were more emotionally understanding than Extraverted, Judging students. Feeling counseling students managed emotions better than Thinking students. Counseling students were more overall emotionally intelligent than medical, business, school psychology students as well as the general population.
Insight into the EI and personality type of counseling students was provided that stressed the importance that counseling students, counselors, and counselor educators increase their awareness of EI, personality type and theoretical orientation, as these factors may be significant in the identity of counseling students. Counselor educators’ focus on EI and personality type could enrich the education of counseling students. A more complete picture of students’ EI could empower them to utilize their interpersonal strengths and emotions; thereby allowing for growth as counseling students and mental health practitioners.
References


https://doi.org/10.1080/0164212X.2010.518435


https://uir.unisa.ac.za/bitstream/handle/10500/3366/dissertation_baptista_a.pdf?sequence=1

https://diginole.lib.fsu.edu/islandora/object/fsu:253190/datastream/PDF/view


https://doi.org/10.1080/01933922.2014.919046


http://web.b.ebscohost.com.ezproxy.uno.edu/ehost/detail/detail?vid=5&sid=6b167136-d194-4963-a14a-74c84b2bb6e%40sessionmgr101&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRI#AN=2005-99014-022&db=psyh

Brown, B. (1997). Raw scores of cognitive ability are real psychological variables: IQ is a hyperspace variable. In V. C. Shipman (Chair), *IQ or cognitive ability?* [Symposium]. American Psychological Society 9th Annual Convention, Washington, DC.


https://doi.org/10.2189%2Fasqu.51.1.1


https://doi.org/10.1108/02683940010330993


https://doi.org/10.1177%2F1754073910374661


https://doi.org/10.19030/cier.v5i1.6780


http://www.humanmetrics.com/cgi-win/jtypes2.asp

https://doi.org/10.1097/NMD.0b013e3182083efb


https://dx.doi.org/10.18203/2320-6012.ijrms20161224


https://www.jstor.org/stable/2011585


https://doi.org/10.1080/026999300379003


https://doi.org/10.1002/job.317


https://doi.org/10.1108/13620430010371937

Lawrence, G. (1993). *People types and tiger stripes*. Gainesville, FL: Center for Applications of Psychological Type.


https://doi.org/10.1016/S0962-1849(05)80058-7


https://doi.org/10.1016/S0191-8869(99)00195-6


https://doi.org/10.2466%2Fpr0.1999.84.3c.1339

https://psycnet.apa.org/doi/10.1037/0022-0167.42.4.411


https://psycnet.apa.org/doi/10.1037/a0031659


https://doi.org/10.2466%2Fpms.1964.18.1.119


https://doi.org/10.1016/S0191-8869(01)00008-3

https://doi.org/10.2224/sbp.2007.35.10.1365


https://doi.org/10.1002/j.1556-6678.2002.tb00180.x


https://doi.org/10.1016/j.paid.2004.05.023


Appendix A

Informed Consent

In accordance with the Office of Human Subjects Research at the University of New Orleans and the 2014 American Counseling Association Code of Ethics (Section G), the following information provides you, the potential participant, with an explanation of the purpose of my research study entitled “The Relationship between Emotional Intelligence and Personality Type in Counselor Education Graduate Students”.

Introduction/ Purpose: I am a doctoral candidate in the Counselor Education and Supervision program at the University of New Orleans, Department of Educational Leadership, Counseling and Foundations. I am conducting my doctoral research under the direction of my dissertation chairperson, Dr. Roxane L. Dufrene. My research will provide important information about the emotional intelligence and personality type of counselor education students. To be eligible to participate, participants must identify as a: (1) master’s or (2) doctoral student enrolled in a CACREP accredited counselor education program.

Procedures: If you choose to participate, you need to fill out a short demographic survey, which will take approximately 5 minutes. Also, you need to complete the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) and Jung’s Typology Test™ (JTT™) using an online version of both tests. The MSCEIT takes approximately 30 to 45 minutes to complete and the JTT™ takes approximately 20 minutes to complete. You will be eligible to enter into a drawing and receive one of four $10 Starbucks gift cards for competing the survey and two tests.

Risks/ Discomforts: The risks in this study are minimal, which may include an increased self-awareness of emotional reactions related to your emotional intelligence and personality type. This awareness may cause mild psychological discomfort. If you experience any discomfort, contact your university’s counseling center, a mental health agency, or a private counselor to address any thoughts or feelings that may bring you discomfort.

Benefits: A benefit is you will be informed of your results from the MSCEIT and JTT™ upon completion of the tests. Your participation in this study will make a valuable contribution to the research on emotional intelligence and personality type in counselor education students.

Confidentiality: All data obtained from participants will be kept confidential and will only be reported in aggregate format (i.e. only combined results, not individual participant results). No one other than the primary investigator or co-investigator will have access to the data. The data will be stored in a HIPPA-compliant, Qualtrics-secure database for at least three years after completion of the research.

Questions about the Research: Please direct any questions or concerns about this study to the co-investigator, Melissa Walker Fleming (******); the principal investigator and faculty adviser, Dr. Roxane L. Dufrene (******); or Dr. Robert Laird, chairperson of the Office of Human Subjects Research Committee at the University of New Orleans (******).

Consent I have read and understood the above consent form and desire of my own free will to participate in this study. (Please place a check mark below) and indicate your email address:

- Yes
- No

Email Address: __________________________________________

Thank you,
Melissa Walker Fleming, LPC-S, NCC, M.Ed.
Doctoral candidate at the University of New Orleans
Appendix B

Brief Statement / Email or Phone Call to Faculty

Hello,

Thank you for your time. My name is Melissa Walker Fleming and I am a doctoral candidate at the University of New Orleans. I am researching emotional intelligence (EI) and personality type in counselor education graduate students. I am interested in soliciting participation for my research study with the counseling students enrolled in your class. I would like to do a brief presentation on my research to your students to explain my study and seek their consent to participate. As part of my research, students will complete a demographic survey, Mayer-Salovey-Caruso-Emotional-Intelligence-Test (MSCEIT), and Jung’s Typology Test (JTT™). My presentation to students and all three instruments will take approximately 1 to 1½ hours to complete. If you want me to, I am also willing to present on the experience of research in order that your students may gain knowledge about research. Your assistance would be very appreciated.

Thanks,

Melissa Walker Fleming, LPC-S, NCC
Appendix C

Brief Statement About Presentations

My presentation will summarize the two topics featured in the research study, emotional intelligence (EI) and personality type. A definition and brief explanation of the four branches of EI (i.e., emotional perception, integration, understanding, and management) will be provided. Research indicating the significance of EI will be discussed. The Mayer-Salovey-Caruso-Emotional-Intelligence-Test (MSCEIT) will be described and a brief description of Jung’s theory of personality type will be given. The benefits of taking the MSCEIT and JTT™ will be explained. Contact information of the researcher will be given.
Appendix D

Agreement to Use the MSCEIT

From: Alysha Liebregts
Sent: July-13-18 10:14 AM
To: Melissa Walker Fleming
Subject: RE: MSCEIT
Hello Melissa,

For the below 2 questions, I have sent to our Research team:
- How many test items are there for each branch of EI?
- What is the range of score for each branch of EI?

For the below question, I am not sure what you mean. You have access so you are allowed to administer the assessment.

Is there a letter of permission to use the assessment?

Client services got back to me. You were set up for MSCEIT scoring organizer on June 18th and would have received an e-mail with the below information.

To login to MHS Scoring Organizer,
1. Go to http://www.mhsassessments.com
2. Click the Click here to manage accounts link.
3. Enter your login ID and Password. Click Login.
   Your ID is: [redacted]
   Your original password is: [redacted]
4. Read the Terms and Conditions of Use and click I accept if you agree.
5. Change your password as instructed.

For EQ-i 2.0, Pearman Personality and Risk Type Compass;

Hello Melissa Walker Fleming,
Welcome to the Talent Assessment Portal! Below you will find your username and password to access the site: your gateway to administering EQ-i 2.0, RTC and Pearman assessments, generating reports, and accessing resources.

Login: http://tap.mhs.com
Username: [redacted]
Password: [redacted]

To get started, you can log into your account as noted above and navigate your way through the portal on your own. The resources located under the Resource Centre tab will assist you with getting comfortable within the portal. Once you log in, click on Resource Centre, click on Tutorials on the left side bar, and select the tutorial of your choice. A good place to start is with the tutorial entitled: Getting Started with EQ-i 2.0 portal.

Alysha Liebregts
Partner Relations Consultant
Talent Assessment

Phone
Canada: [redacted]
United States: [redacted]
International: [redacted]
Fax: [redacted]
<image005.png><image006.png> <image007.jpg>
Appendix E

Demographic Survey

Please place a check or indicate a response to the following questions about yourself.

1. Gender
   a. Female ____
   b. Male ____
   c. Transgender ____

2. Age _________

3. Race
   a. American Indian or Alaska Native ____
   b. Asian ____
   c. Black or African American ____
   d. Native Hawaiian or Other Pacific Islander ____
   e. White/Caucasian ____
   f. Biracial ____
   g. Hispanic/ Latino ____
   h. Other __________________________________________

4. Theoretical orientation
   a. Psychoanalytic/nonanalytic ____
   b. Behavioral ____
   c. Cognitive ____
   d. Systems ____
   e. Person-centered ____
   f. Gestalt ____
   g. Interpersonal ____
   h. Existential/humanistic ____
   i. Other __________________________________________

5. Level of counselor education graduate program enrolled in:

   Level
   a. Master’s Pre-practicum _____
   (only taking didactic courses)
   b. Master’s Practicum or Internship _____
   c. Doctoral _____

6. Number of counselor education coursework hours completed _________

7. Number of years of counselor education study completed ____________

8. Personality type (online score) _____________________
Vita

Melissa W. Fleming was born and raised in Baton Rouge, Louisiana. After graduating high school in 2003, she attended Louisiana Tech University and obtained a Bachelor of Arts in Journalism, with a minor in psychology in 2008. In 2011, Melissa earned a Master of Education degree in counselor education from the University of New Orleans. She completed her clinical practicum and internship at Trinity Counseling and Training Center in New Orleans, Louisiana. After graduating, she worked as a therapist at a private practice in rural Louisiana, where she acquired clinical hours and supervision for licensure. Melissa is a Licensed Professional Counselor and Supervisor in the state of Louisiana and is also recognized as a National Certified Counselor. Throughout her career, Melissa has worked with a broad spectrum of clientele including children, adolescents, adults, couples, families, and groups. She currently owns and operates a private practice in Prairieville, Louisiana. She is married and has two daughters, Evelyn, 3, and Clara, 8 months. She and her husband are expecting another daughter, Chloe, soon. She is passionate about treating clients with a cognitive-behavioral approach who struggle with depression and anxiety. Melissa hopes to continue her research in emotional intelligence and personality type, as well as implementing her findings into her clinical work.