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Pre-Service Teacher Perception of Instructor Emotional Intelligence

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Concordia University–Portland

College of Education

Doctorate of Education Program

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Pre-Service Teacher Perception of Instructor Emotional Intelligence

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College of Education

Dissertation submitted to the Faculty of the College of Education

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Abstract

The purpose of this qualitative case study was to explore how pre-service teachers perceive instructor emotional intelligence (EI) in a state college teacher education environment. An operational construct sampling of 12 pre-service teachers investigated the real-time experiences of pre-service teachers in a state college teacher preparation program specifically in exploring instructor EI and EI awareness of self and others. Instrumentation and data collection was accomplished by semi-structured interview, observation, and an online EI survey. Themes identified include: emotional connection through instructor support and empathy, emotional awareness through use of and facilitation of emotions, and emotional engagement through instructional attributes. Teaching practices observed that strongly support high academic engagement included: safe, respectful classroom environment, empathetic listening and positive connections, stress validation, and meaningful, relevant work. Limitations to this study include the lack of generalizability of the study results, as this study was conducted at one unique state college location. The results of this study have the following implications for the practice of teaching and pre-service teacher education. In the workplace, understanding, negotiating, and monitoring the intense emotionality is a primary dimension of teachers' work which places elevated stress on teachers' EI. Emotional intelligence may be beneficial for teachers' psychological well-being and may have a protective effect in reducing burnout. It is suggested that pre-service education programs incorporate emotional intelligence competency building to enhance teachers' expertise and improve their ability to perceive and regulate the emotions of themselves and others.

Keywords: case study, pre-service teachers, emotional intelligence, instructor support, empathy, and instructional attributes.

Dedication

This work is dedicated to my Lord and Savior without whom my strength would have most assuredly failed. And to my three children, Christopher, Justin, and Ashley, who have been my inspiration and encouragement throughout this journey. Thank you for being my chief chefs and dog walkers, for comic relief, for tech support, and kind communication when I just needed a break. But most of all thank you for your steadfast love and support not only on this journey but every day. I am so proud to call you my children and pray you will always reach for presumably unsurmountable goals, knowing you have the drive, intelligence, and grit to achieve them.

I can do all things through Him who strengthens me.

(Philippians 4:13 New American Standard Bible)

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Chapter 1: Introduction

Introduction to the Problem

Teaching is a fulfilling profession, but it may also be stressful. According to the Alliance for Excellent Education report (Haynes & Maddock, 2014), 40% of novice teachers exit the profession within five years. Florida's attrition rate for novice teachers is 15–20% higher than the nationwide average (Maxwell, 2016), with teacher turnover costing school districts between \$61,000,000 and \$130,000,000 dollars each year (Caputo, 2017). Reasons cited for leaving the profession include “inadequate administrative support, isolated working conditions, poor student discipline, low salaries, and a lack of collective teacher influence over school-wide decisions” (Haynes & Maddock, 2014, p. 4). Emotional intelligence theory has been found relevant to the teaching profession through the provision of new teacher training and support. Haynes and Maddock (2014) found a comprehensive new teacher induction system of support from both peers and school leadership fostered a higher degree of workplace satisfaction, especially in areas of teacher collaboration, social interactions, and peer mentoring. This is confirmed in Barnwell (2015), whereby teacher satisfaction was directly related to collaboration time during the teacher workday, capable and supportive principals, and shared common vision. The social-emotional aspects of teaching are germane in how teachers accurately and flexibly cope with situations related to personal, social, and environmental change, as well as in their choice of socially adaptive behaviors in response to said situations (Salovey & Mayer, 1990).

Emotional intelligence competencies and traits have been linked to workplace satisfaction and social well-being. Schutte and Loi (2015) found greater emotional intelligence was notably associated with better mental health, increased work engagement and satisfaction, as well as perceived power in the workplace. Altindag and Kosedagi (2015) found emotionally intelligent

managers had a direct and positive impact on innovative company culture and employee performance. Factors affecting organizational innovation include creating an environment of employee flexibility and autonomy, cross-functional teams with interaction between groups, encouraging risk-taking by welcoming errors, developing a culture for learning and change, and supporting formal and informal communication channels at all levels of an organization (Altindag & Kosedagi, 2015).

Emotional Intelligence (EI) as described by Mayer and Salovey (1997) is “the ability to perceive emotions, to access and generate emotions to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote intellectual growth” (p.31). As shown in Table 1, EI may be divided into three approaches including the ability model, personality or trait EI model, and the mixed or competency model (Caruso, Salovey, Bracket, & Mayer, 2015). Mayer, Caruso, and Salovey (2016) view ability EI as a broad intelligence under the three-stratum or Cattell-Horn-Carroll model grouped hierarchically with general intelligence at the top. Within the subclasses of broad intelligences, one class includes basic functions of the brain associated with mental processing speed and working memory, while another reflects sensory systems including auditory intelligence and tactile/physical intelligence (Mayer et al., 2016). Other subclasses of broad intelligences represent subject matter knowledge including verbal intelligence (Mayer et al., 2016).

Table 1

Emotional Intelligence Models

Model	Definition	Characteristics
Ability	Emotion skills	Emotion perception and regulation
Trait	Non-cognitive traits	Assertiveness, optimism, happiness
Mixed/Competency	Leadership competencies	Achievement, transparency, service orientation

Note. Overview of emotional intelligence models. Adapted from “The Ability Model of Emotional Intelligence,” by D.R. Caruso, P. Salovey, M. Brackett, and J.D. Mayer, 2015. *Positive Psychology in Practice*, p. 545-555. Copyright John Wiley & Sons.

Raz and Zysberg (2015) analyzed neuroanatomical, neurochemical, and neurofunctional studies over fifteen years of EI studies and found significant correlations between EI and brain function. Studies indicate individuals with different levels of EI exhibit different patterns of brain activity surmising both geographical and functional brain patterns are associated with EI (Raz & Zysberg, 2015). Recent findings in the field of neuroscience have confirmed interdependent neural processes support emotion and cognition, and it is “neurobiologically impossible to build memories, engage complex thoughts, or make meaningful decisions without emotion” (Immordino-Yang, 2015, p. 7). According to Immordino-Yang (2015), the original purpose of the brain was to monitor and manage the state of the body to optimize survival, thus body and mind are engaged in a complex cycle of information sharing and decision-making. Ability EI was found to be instrumental in health outcomes from subjective and psychological

well-being to psychological and physiological pathology in a study by Lanciano and Curci (2015). Lanciano and Curci (2015) found ability EI central in maintaining positive mood, adaptive coping and effective emotion regulation, as well as in maintaining social support networks.

Background, Context, History, and Conceptual Framework for the Problem

While there are several alternate models of EI, the three dominant models used frequently in EI research include the ability model, the trait model, and the mixed or competency model (Hess, 2015). The ability model (Mayer et al., 2016) characterizes EI as a set of four developmentally sequenced abilities beginning with perceiving emotions, facilitating thought by employing emotions, discerning emotions, and governing emotions in oneself and others, and is measured via performance-based assessments. According to the trait model, EI is a function of personality rather than cognitive ability and is based on a cluster of self-perceived dispositions operating at the secondary tier of personality (Siegling, Vesely, Petrides, & Saklofske, 2015). Trait EI (TEI) is assessed through self-report methods (Hess, 2015; Russo, Mancini, & Trombini, Baldaro, Mavroveli, & Petrides, 2011). Goleman's mixed model advances EI in terms of four domains each with a cluster of competencies and skills that advance leadership performance (Hess, 2015). All domains—self-awareness, self-management, social awareness, and relationship management—are interrelated whereby self-awareness facilitates empathy and self-management. Together these competencies promote effective social awareness and relationship management (Goleman, 2013). As indicated in Figure 1, familiarity and mastery of personal emotions and how they influence behavior results in effective management of emotions for organizational success (Goleman, 2013). Thus, a foundation of self-awareness is key to EI in

leadership and plays an important role in social awareness, specifically empathy which allows a leader to sense shared priorities and act appropriately for the situation (Goleman, 2013).

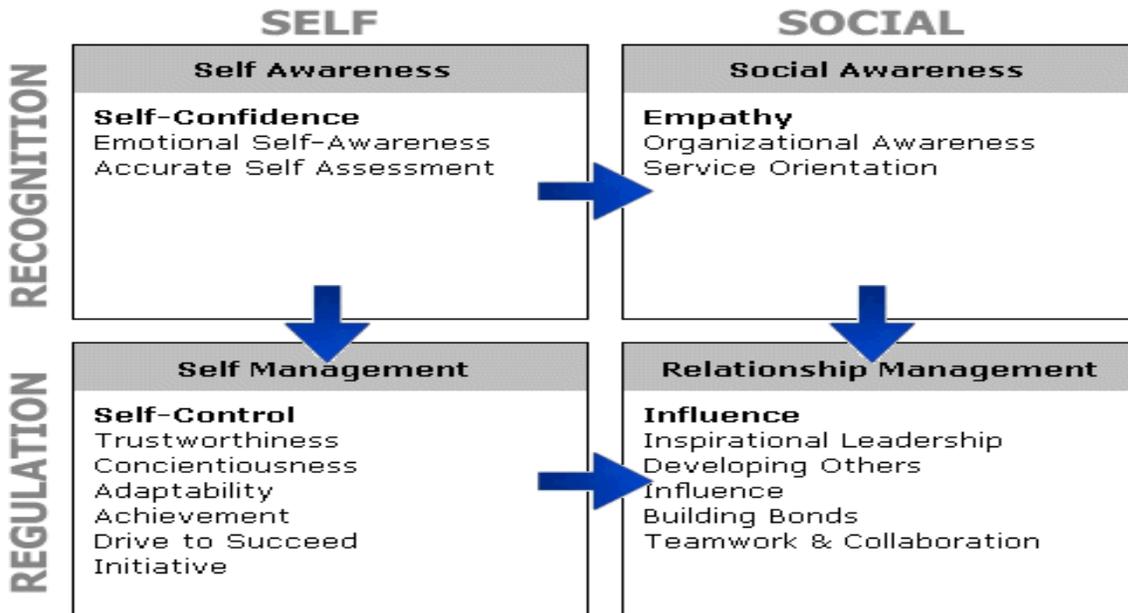


Figure 1. A representation of the mixed model of EI indicating self-awareness as the linchpin to higher levels of emotional recognition and regulation. Adapted from “Emotional Intelligence: An Essential Trait of a Strategic CFO,” by K. Indhamath, 2015, *IMA Member Linkup*. Copyright 2017 by the Institute of Management Accountants.

Recent studies confirm the importance of EI in student achievement and instruction. A meta-analysis of 47 studies with students from primary to tertiary levels by Perera and DiGiacomo (2013) confirm trait emotional intelligence is tied to cognition and learning. Perera and DiGiacomo (2013) found a modest to moderate validity of TEI in predicting academic achievement. In a study by Costa and Faria (2015), ability EI was found to predict academic proficiency in secondary students. Maskit (2015) examined the associations between teachers’ self-perceived professional development stage and EI and found EI was positively associated with the amount of perceived positive experiences and negatively associated with negative

experiences at work. In Hess' (2015) study of EI as a predictor of student teachers' performance, the results support a model in which teacher self-efficacy mediated the associations between EI and student teachers' outcome measures. Emotional intelligence and teaching self-efficacy were found to be predictors of teaching ability in a study by Walter and Marcel (2013) who suggest the effective use of emotions increases teacher perception of command and autonomy, the ability to actualize emotions in varied teaching situations, and the capability to mobilize emotions to achieve a specific teaching target.

Statement of the Problem

There is a decided association between EI and cognitive, behavioral, and social engagement in education (Cherniss, 2010). A growing body of empirical research confirms EI competencies and traits are associated with teacher effectiveness, workplace satisfaction, and overall well-being (Cazan & Nastasa, 2015; Hess, 2015; Kahu, et al., 2015; Maskit, 2015; Oberle & Schonert-Reichl, 2016; Onen & Ulusoy, 2015; Sanchez-Ruiz, et al., 2012; Schutte, 2014). While the importance of EI in student learning and the psychological and social well-being benefits of EI have been established, there was a gap in research specifically addressing EI and pre-service teacher perception of instructor EI. Realizing the importance of EI to student achievement, instructional practice, and perceived teacher support, this study explored how pre-service teachers in a state college environment perceived instructor EI in content and pedagogy.

Purpose of the Study

The purpose of this qualitative case study was to explore how pre-service teachers' perceived instructor EI in a state college teacher education environment. According to Ingersoll, Merrill, and May (2014), new teacher attrition is highest just after the first year of teaching, although certain elements were found to decrease the likelihood of teachers leaving the

profession. Teacher preparation programs that included coursework in teaching methods, pedagogical preparation, and learning theory, with extensive opportunities to observe and practice teaching were found to significantly increase new teacher retention (Ingersoll et al., 2014). In a study by Arghode (2013), EI and social intelligence competency with perceived social support helped students feel connected to instructors and encouraged student achievement and engagement. Formal feedback the first year from instructors and mentor teachers on teaching practices may provide a measure of social support critical for beginning teachers who may question their craft in the face of daily stressors relative to teaching.

EI has also been found significant in effective stress management (Zysberg, Orenshtein, Gimmon, & Robinson, 2016), and educators with high levels of EI in their personal and professional life are better able to withstand the daily stressors of classroom teaching (Schutte & Loi, 2014; Zeidner, Matthews, & Shemesh, 2015). Perera and DiGiacomo (2015) found a direct link between TEI and perceived social support and engagement coping, and findings suggest those with high TEI report better psychological adjustment and regulation. High EI has been robustly associated with lower stress, higher perceived social support, and higher well-being (Zeidner & Matthews, 2016). EI competency may be a key factor to reducing new teacher attrition while increasing student achievement in the classroom. Effective stress management begins with emotional awareness of self and others. The significance of this study lies in the potential to identify EI attributes and competencies in pre-service teacher preparation programs and how they contribute to student success and well-being. In identifying pre-service teacher awareness of instructor EI, institutions of higher learning and school districts may include EI development in programs of study to build capacity for social-emotional learning.

Research Questions

This study focused on specific factors of the ability model of EI within the Wong and Law Emotional Intelligence Scale (WLEIS). The four factors of the WLEIS include: OEA-Others' Emotional Appraisal, ROE-Regulation of Emotion, SEA-Self Emotional Appraisal, and UOE-Use of Emotion (Karim & Weisz, 2011; Sulaiman & Noor, 2015).

- RQ 1: How do pre-service teachers in a state college teacher education program perceive the nature of instructor EI? (OAE)
- RQ 2: How do pre-service teachers perceive EI in self and others? (OEA, SEA)
- RQ 3: What instructional (cognitive) and/or relational (affective) attributes are most associated with instructor EI? (OEA, UOE)

Rationale, Relevance, and Significance of the Study

While the importance of EI in academic performance, teaching practices, and social support had been established; an absence of clarity around EI in pre-service education remained. It was not known how pre-service teachers perceived EI in self and others specifically in a teaching and learning environment. This study targeted a gap in the literature by examining pre-service teacher perception of EI in self and others to expand empirical research on EI in education. The results of this research may benefit curriculum specialists, district hiring staff, and higher education faculty and leadership.

Definition of Terms

Ability EI. This term defines a four-branch model of perceiving and identifying emotions in self and others, employing emotions to garner attention, comprehending emotions, and utilizing emotions to regulate temperament and emotions in self and others (Lanciano & Curci, 2014).

Emotional Intelligence. This term encompasses the ability to recognize, control, and command emotions in self and others. The three most common models of EI include the ability model, the trait model (TEI), and mixed models including personality traits (Caruso, et al., 2015).

Mixed Model EI. This term defines a model of EI focused on skills and competencies associated with leadership. The four constructs of mixed model EI include: Self-awareness, self-management, social awareness, and social management (Indahmath, 2015).

Trait EI. This term defines a personality construct of EI that postulates EI as a collection of noncognitive motivational tendencies and self-perceptions (Perera, 2016; Petrides, 2011).

Assumptions, Delimitations, and Limitations

Limitations of this study included the contingency of sample size based on student participation and the use of a self-report survey. This case study involved perspectives of one group of pre-service teachers, which may not generalize to other similar groups of pre-service teachers. The presence of the researcher during interviews or observations may have contributed to observer bias of participant responses. Student perception of EI factors and personality traits may have been influenced by personal and educational experiences at the time of survey implementation. Another limitation may have been student understanding or misunderstanding of EI competencies.

Chapter 1 Summary

In summary, this study was designed to add to empirical research on the topic of pre-service teachers and instructor EI in a postsecondary academic environment. This study began with an introduction to EI theory and its relevance to the teaching profession. Chapter 2

provides a review of current literature on the topic of EI theory specifically related to EI in academic performance and teaching effectiveness, and EI's association with workplace flourishing and satisfaction in life. Methodological issues in current research are explored and critiqued in the literature review to establish a foundation for this research study. A discussion on study methodology follows in Chapter 3 with details as to why the identified qualitative case study design was optimal for the specified research topic with study population and sampling, instrumentation, and data analysis procedures. Chapter 4 reports the study data collection and analysis with discussion, and Chapter 5 presents a summary of the research findings predicated on the current study and existing findings in the field.

Chapter 2: Literature Review

Introduction to the Literature Review

According to the Yale Center for Emotional Intelligence (2013), emotions matter in student education. Emotions contribute to how one perceives learning, educational decision-making and problem solving, as well as how one treats self and others (Yale Center for Emotional Intelligence, 2013). The classroom is a primary channel to develop emotional competencies that may aid in student success and achievement since U.S. elementary students spend an average of 943 hours per year in the classroom with secondary students at 1016 hours per year (Desilver, 2014). The level and quality of teacher EI may provide a link between student performance and success in the classroom. Arguedas, Daradoumis, and Xhafa (2016) found higher student performance in classrooms where teachers encouraged student emotional awareness. Conversely, Oberle and Schonert-Reichl (2016) found higher cortisol levels in students experiencing high levels of burnout indicating greater student stress, which may stymie student achievement.

Madalinska-Michalak (2015) found good teaching involves more than content knowledge and in fact requires emotional competencies to skillfully navigate through various personal, instructional, and outside challenges encountered daily. Cazan and Nastasa (2015) confirmed the importance of emotions in teaching practice whereby teachers with high levels of EI were associated with less anxiety, stress, and burnout, and greater levels of life satisfaction (Petrides, 2017). Research confirms the importance of EI awareness and competency in the classroom. The purpose of this study was to explore how pre-service teachers perceive instructor EI in a state college teacher education program.

This literature review begins with a discussion of the conceptual framework for the present study, followed by a review of prominent EI theories and current research on EI and its relation to student achievement, life satisfaction, and pre-teacher training and pedagogy. A review of methodological issues and synthesis of research findings follows. This literature review will conclude with a critique of previous research and a Chapter 2 summary.

Conceptual Framework

EI as presented by Mayer, Salovey, Caruso, and Sitarenios (2001) consists of four components or branches detailing the management, understanding, integration, and perception of emotions. Goleman, Boyatzis, and McKee (2013) link EI to leadership with personal and social competencies vital for effective organizational management. Personal competencies of self-awareness and self-management incorporate awareness of personal emotions and proficiency in regulating them accordingly in various situational environments. Social competencies are of importance to leaders in managing relationships to increase organizational sustainability and success. Specifically, social awareness includes “sensing others’ emotions, understanding their perspective, and taking active interest in their concerns” (Goleman, et al., 2013, p. 39). Similarly, Bar-On (2006) presents EI as an interrelated network of emotional and social competencies including the ability to:

- (a) ...recognize, understand, and express emotions and feelings, (b) understand how others feel and relate with them, (c) manage and control emotions, (d) manage change, adapt and solve problems of a personal and interpersonal nature, and (e) generate positive effect and be self-motivated. (p. 20)

EI has been studied under the leadership lens and its relation to organizational success (Doe, Ndinguri, & Phipps, 2015; Kotze & Nei, 2015; Siegling, Nielsen, & Petrides, 2014),

university leadership and effectiveness (Hafiz & Chouhan, 2015; Jaykody & Garmage, 2015; Shila & Seville, 2015), and student academic performance at different educational levels (Arguedas, Daradoumis, & Xhafa, 2016; Costa & Faria, 2015; Perera & DiGiacomo, 2015; Qualter, Gardner, Pope, Hutchinson, & Whiteley, 2011; Sanchez-Ruiz, Mavroleli, & Poullis, 2012). EI has also shown significance in guarding against workplace burnout and stress, as well as being instrumental to increased life satisfaction (Bao, Xue, & Fong, 2015; Ju, Lan, Li, Feng, You, 2015; Schutte & Loi, 2015; Wang & Kong, 2014).

Studies of EI in education both with students and instructors have provided a wealth of information as to its promise in building a climate of success and well-being. Austin, Saklofske, and Mastoras (2010) found higher stress levels were associated with lower EI in a study of EI, coping, and exam-related stress, while higher intrapersonal EI was significantly associated with task-related coping. Higher EI has been associated with more effective stress management as well as greater skill in managing social interactions (Zeidner, Matthews, & Shemesh, 2015). Skill in perceiving, using, managing, and regulating emotions may assist educators in sustaining resilience in the profession the first five years of practice and beyond.

Teaching is a stressful occupation and new teachers are especially vulnerable to burnout the first five years of teaching (Phillips, 2015). Haynes and Maddock (2014) report school districts lose more than \$2,200,000,000 dollars a year to teacher turnover with the highest departure rates seen with beginning teachers. Primary causes include a perceived lack of autonomy in the classroom, followed by student misbehavior and discipline (Phillips, 2015). According to Haynes and Maddock (2014), induction and mentoring programs support new teacher retention by fostering effective classroom teaching practices that increase student achievement. Individuals with high EI may perceive work environments as more supportive and

feel they have a greater sense of control over workplace situations (Houghton, Wu, Godwin, Neck, & Manz, 2012; Schutte & Loi, 2015). Instructor EI in pre-service education may factor in new teacher perception of instructional effectiveness and life satisfaction thus reducing attrition rate among new teachers. The purpose of this study was to explore the nature of pre-service teacher perception of instructor EI in teaching and learning environments. This study also examined how pre-service teachers perceive EI in self and others.

Literature Review and Methodological Literature

EI theory may be partitioned into three theoretical constructs: a) the ability model; b) the trait model; and c) mixed models of EI that combine components of the ability model with behavioral and competencies (Goleman, Boyatzis, & McKee, 2013). As indicated in Table 2, the ability model focuses on four hierarchically grouped skill areas of perceiving emotions, employing emotions to advance thought, understanding emotions, and regulating emotions to enhance social relationships (Ayiro & Sang, 2012; Polly, 2016). Salovey and Mayer were the first to propose a theoretical model of EI initially composed of three branches of interrelated cognitive-emotional abilities (Perera, 2016). The ability model of EI measures cognitive processing of emotional stimuli through maximal performance assessments (Perera, 2016).

Trait EI (TEI) or trait self-efficacy is defined as “a constellation of emotional self-perceptions located at the lower levels of personality” (Petrides, Pita, & Kokkinaki, 2007; Petrides, 2010, p. 137). Empirical research, behavioral genetic research, and factor location studies support the theoretical conceptualization of TEI as a personality construct (Perera, 2016). There are four broad domains and fifteen sub-factors within the TEI framework including well-being (self-esteem, trait happiness, optimism), self-control (emotion regulation, stress management, low impulsiveness), emotionality (emotion perception and expression, relationship

skills, empathy), and sociability (social awareness, emotion management, assertiveness) (Cho et al., 2015).

Table 2

Four-Branch Ability Model of Emotional Intelligence

Branch	Description of measure	Relation to intelligence and personality
4: Managing emotion	Ability to manage emotions and emotional relationships for personal and interpersonal growth	Interface with personality and personal goals
3: Understanding emotion	Ability to comprehend emotional information about relationships, transitions from one emotions to another, linguistic information about emotions	Central locus of abstract processing and reasoning about emotions and emotional information
2: Facilitating emotional thought	Ability to harness emotional information and directionality to enhance thinking	Calibrates and adjusts thinking so that cognitive tasks make use of emotional information
1: Perceiving emotion	Ability to identify emotions in faces, pictures	Inputs information to intelligence

Note. The four-branch model of emotional intelligence indicating hierarchy of skills. Adapted from “Emotional Intelligence as a Standard Intelligence,” by J.D. Mayer, P. Salovey, D.R. Caruso, and G. Sitarenios, 2001. *Emotion*, 1(3), p. 235.

Adaptability and self-motivation are additional sub-factors of TEI but do not reside within the four domains. The nature of TEI is considered subjective rather than objective and is measured using a self-report method rather than a cognitive ability test format (Cho et al., 2015).

The Trait Emotional Intelligence Questionnaire (TEIQue) is self-evaluation instrument that measures each TEI domain and sub-factor on a seven-point Likert scale, which allows for the use of descriptive statistics to analyze responses (Benson, Fearon, McLaughlin, & Garratt, 2014).

The mixed or competency model of EI integrates components of the ability model with behavioral and competencies (Goleman, Boyatzis, & McKee, 2013). Boyatzis (2009) defines a competency as a capability or ability. The behavioral or competency approach as outlined by Boyatzis (2009) combines cognitive competencies, EI competencies, and social intelligence competencies into a system of knowledge, expertise, and cognitive competencies found to distinguish outstanding performance in the workforce leaders. In this model competencies are clustered by intelligence. EI competencies include self-awareness and self-management clusters. Social intelligence competencies include social awareness and relationship management clusters, and cognitive intelligence competencies include systems thinking and pattern recognition (Boyatzis, 2009). Empathy and organizational management are contained within the social intelligence cluster, while adaptability, achievement orientation, positive outlook, and emotional self-control is within the emotional intelligence cluster (Boyatzis, 2009).

The Bar-On model of emotional-social intelligence consists of five complementary emotional and social competencies including (a) intrapersonal skills: self-awareness and self-expression; (b) interpersonal skills: social awareness and interaction; (c) stress management: emotional management and coping; (d) adaptability: change management and flexibility in problem solving; and (e) general mood: self-motivation and optimism (Powell, Mabry, & Mixer, 2015). According to Bar-On (2006), effectively managing and regulating personal, social, and environmental change through flexible and realistic coping while remaining optimistic and self-motivated are indications of one who is socially and emotionally competent.

The role of EI in instruction has been studied from student and instructor perspectives. Arghode (2013) reviewed literature from 1996–2012 to determine if an instructor’s emotional and social intelligence affected student instruction and learning outcomes. Arghode (2013) found students felt connected with instructors who exhibited emotional and social competence through support and encouragement, and emotional and social competence contributed to effective instruction. Interest and enjoyment in course work were shown to emotionally engage students in Kahu, Stephens, Leach, and Zepke’s (2015) qualitative study of the relationship between academic emotions and student engagement. Boredom, frustration, and worry were found to significantly inhibit student engagement especially in students with a low degree of academic self-efficacy (Kahu, et al., 2015). Hassan, Jani, Som, Hamid, and Azizam (2015) found a significant correlation between EI skills and teaching effectiveness in a quantitative study of 155 lecturers. Teaching effectiveness skills of instructional clarity, lecturer-group interaction, lecturer-individual student interaction, and lecturer enthusiasm were positively correlated to EI competencies of interpersonal, intrapersonal, personal leadership, and self-management skills (Hassan et al., 2015). As well, Perera and DiGiacomo (2013) confirmed the predictive validity of TEI and academic performance in a meta-analysis of 40 studies that found a modest-to-moderate validity coefficient for TEI. The researchers submit the findings support the theoretical standpoint of the importance of trait EI on academic performance although causality cannot be inferred from the results of the meta-analysis (Perera & DiGiacomo, 2013).

Using the Swinburne University EI Test (SUEIT-EY) to study the relationship between EI and scholastic achievement in a sample of 407 pre-adolescent girls and boys, Billings, Downey, Lomas, Lloyd, and Stough (2014) found significant correlations between social desirability and each branch with a significant relationship between the understanding and

analyzing emotions branch and scholastic achievement. Social skills and student behavior were the focus of Poulou's (2014) correlational study of 559 adolescents examining the role of personality characteristics and social skills with emotional and behavioral difficulties. Poulou (2014) found adolescents with more advanced TEI and stronger social skills were less likely to possess emotional and behavioral complications. Although Poulou (2014) concedes study results may not generalize across broad demographics and a causal relationship cannot be assumed, findings help to unpack predictors of student behavior and may aid in identification and intervention of problem behavior. Poulou (2014) recommends teachers receive greater development in the social interplay among students and how trait EI may be an influential factor with students' emotional and behavioral difficulties. Billings et al. (2014) submit EI should be consciously and constructively developed in student education to increase achievement. Zeidner, Matthews, and Shemesh (2015) confirm the importance of EI for social well-being but contend the focus should be on social skills and engagement training rather than on attempts to increase EI. Salovey and Mayer (1990) associated positive relationships with individuals being able to accurately choose socially adaptive responses to peer behaviors, which in turn contributes to greater life satisfaction through efficient coping mechanisms and more effective emotional regulation. High EI results in high social competence thus those high in EI generally have better social support networks (Mayer et al., 1999).

Mindfulness and self-esteem have been associated with EI in studies related to life satisfaction, coping, and burnout. An exploratory study by Chhabra and Kaur (2014) involving a sample of 400 adolescents found a significant positive correlation between mindfulness and EI in that mindfulness may enhance EI and improve well-being. Mindfulness, or the voluntary regulation of attention and the ability to stay focused on the present disregarding negative

emotions, has been associated with lower levels of stress and greater coping skills, and in higher education found to reduce anxiety and enhance well-being (Chhabra & Kaur, 2014). Cazan and Nastasa (2015) found higher degrees of EI are concordant with decreased degrees of anxiety, stress, and burnout with a greater sense of life satisfaction. Cazan and Nastasa's (2015) results correspond with Curci, Lanciano, and Soleti's (2014) study of emotions in the classroom. Curci et al. (2014) found teachers' EI had a decisive role in bolstering students' achievement by developing students' perception of ability and self-esteem. Both Cazan and Nastasa (2015) and Curci et al. (2014) assert development of EI in students and teachers may lead to greater management of emotions and greater resilience and academic adjustment (Cazan & Nastasa, 2015). In a study of 475 undergraduate students, Austin, Saklofske, and Mastoras (2010) found high levels of stress were associated with lower EI component scores with emotional regulation and task-focused coping mediating the effect of personality and stress on subjective well-being. Similarly, Onen and Ulusoy (2015) confirmed individuals with high self-esteem are more adaptable at work, more confident about their ability to attain success, and less apt to take feedback negatively. Onen and Ulusoy (2015) found pre-service teachers with low self-esteem had lower levels of EI and those with high self-esteem had higher levels of EI. In teaching, high self-esteem equates to more creative, sociable, self-confident personalities, all qualities Onen and Ulusoy (2015) deem important for those in the teaching profession.

In a study examining workplace flourishing and EI, Schutte and Loi (2014) found elevated EI was significantly associated with exceptional mental health, work engagement, and perceived social support, as well as perception of greater influence and power in the workplace. Similarly, Holinka (2015) found a negative correlation between stress and life satisfaction in college students, however no significant correlation was determined between life satisfaction and

EI. Teaching satisfaction was the focus of Yin, Lee, Zhang, and Jin's (2013) study that confirmed the influence of EI on two emotional labor strategies required to function in a job role. Emotional labor strategies of deep acting and expression of naturally felt emotions had a direct bearing on EI and teaching satisfaction (Ye & Chen, 2015; Yin, Lee, Zhang, & Jin, 2013).

The role of the instructor in establishing an academic environment conducive to learning has been empirically proven and teacher EI has been found significant in recent studies. Austin et al. (2010) found students with low EI were especially vulnerable to increased levels of stress and subjective well-being, while Urquijo, Extremera, and Villa (2016) found EI was firmly associated with life satisfaction and psychological well-being. Higher levels of emotional regulation and task-focused coping were found to mediate the effect of stress on student well-being as opposed to emotion-focused coping that was negatively associated with stress management (Austin et al., 2010). Using a stress-contagion framework, Oberle and Schonert-Reichl (2016) found teacher burnout to be linked to elevated cortisol levels in elementary students inducing stress and arousal. This aligns with previous research indicating raised cortisol levels are related to stressors in the school environment (Oberle & Schonert-Reichl, 2016). Employing Mayer and Salovey's ability model of EI, Concoran and Tormey (2102) surveyed 352 student teachers for EI skills of perceiving, understanding, managing, and integrating emotions. Findings indicated less than average levels of EI in all skill areas with a deficit in perceiving emotions in self and others (Concoran & Tormey, 2012).

A more recent study by Turculet (2015) investigated the level of emotional development, creativity, and innovation of primary school teachers and found teacher emotional development to be at the average or above average range. Specific training programs are recommended by Turculet (2015) for pre-service and veteran teachers to promote emotional literacy and

competency. Hen and Sharabi-Nov (2014) submit socially and emotionally intelligent teachers create a safe, nurturing, and supportive classroom environment. Hen and Sharabi-Nov (2014) conducted a mixed-model quasi-experimental study including a journal study based on the ability model of EI. The training model developed by Hen and Sharabi-Nov (2014) focused on teacher exploration of individual self-awareness and how self-awareness leads to positive changes in behavior. Through the training teachers learned the importance of EI skills in academic learning, decision-making, classroom management, interpersonal relationships, team building, life satisfaction, and stress management—all areas deemed to foster professional and personal success (Brackett & Katulak, 2010). At the end of the training, Hen & Sharabi-Nov (2014) found a significant improvement in all categories of EI with the most compelling increase in the ability to perceive others' perspectives, as well as a reduction in personal stress as measured from a pre- and post- training assessment.

Classroom teaching practices may be improved through emotional literacy programs and trainings that elicit teacher analysis, reflection, and emotional competence building (Madalinska-Michalak, 2015). When teachers understand the value of emotions in student interactions and engagement, student achievement increases as well as teacher capacity to manage relationships (Madalinska-Michalak, 2015). A study by Dumitriu, Timofti, and Dumitriu (2014) suggests training programs to develop emotional competency be integrated into pre-service education programs. Dumitriu et al. (2014) identifies five areas of importance for pre-teacher training including:

- The identification and analysis of negative emotional states such as fear, anger, and rage;

- Practicing certain techniques of awareness and control of negative emotions, of understanding and accepting them;
- Training techniques for the recognition and understanding of others' emotions;
- The development of capacity to manage negative emotions using strategies of self-regulation or emotional facilitation of thinking; and
- The assimilation of certain strategies for progressive development of assertiveness, empathy, and effective communication techniques. (p. 872)

There is a robust body of empirical research on EI in education as related to both instructors and students. Research on EI theory and application confirms the importance of developing EI competencies and skills for greater academic performance, life satisfaction, and teaching effectiveness. The cited body of research provided a foundation for the study of EI competencies and traits associated with increased teacher effectiveness and workplace satisfaction and addressed a need to develop EI skills in pre-service and veteran teachers. Next steps would be to investigate specific EI competencies with a focus on strategies and training to implement within teacher preparation programs.

Review of Methodological Issues

EI has been studied from both qualitative and quantitative methods. In analysis of current research studies on EI in education, EI in the workplace, and life satisfaction, the primary methodology for study has been from the quantitative perspective. Quantitative research focuses on observing and collecting numerical data and statistical analysis to prove or disprove research hypotheses (Klazema, 2014). EI has been less frequently studied with a qualitative method. Qualitative research seeks to answer 'how' and 'why' questions about contemporary issues not requiring manipulation of behavioral events (Yin, 2014). An analysis of both quantitative and

qualitative methodologies in current EI research follows, with an emphasis on EI in education and identification of common themes found in the research.

Of the four basic types of quantitative research—descriptive, correlational, causal-comparative, and experimental (Klazema, 2014), correlational designs tend to factor most highly in studies of EI. In determining the relationship of EI to student academic performance, personal well-being, and workplace flourishing, researchers utilized correlational analysis to determine significance of EI within sample groups (Concoran & Tormey, 2013; Holinka, 2015; Schutte & Loi, 2015; Turculet, 2015;). The dominant instrument used to evaluate ability EI is the Mayer, Salovey, and Caruso Emotional Intelligence Test (MSCEIT). The MSCEIT is a self-report questionnaire consisting of eight tasks with 141 items predicated on the four-branch model of EI with an overall reliability rate of .91 (Mayer, Salovey, & Caruso, 2004). The MSCEIT has been used in current research to investigate EI in pre-service teachers (Concoran & Tormey, 2013), the role of intelligence, personality, and EI to resilience and life satisfaction (DiFabio & Saklofske, 2014), the relationship between EI of managers and company culture (Altindag & Kosedagi, 2015), EI as a predictor of academic achievement (Lanciano & Curci, 2014), and organizational management ability to self-assess EI competency (Sheldon, Ames, & Dunning, 2014).

There are several instruments used to measure mixed EI. One of the most widely used instruments is the Bar-On Emotional Quotient Inventory (EQ-i), a self-report instrument of 133 items within fifteen subscales and five higher-order domains including intrapersonal, interpersonal, adaptation, stress management, and general mood (Perez, Petrides, & Furnham, 2005). Other mixed method measures include the Trait Emotional Intelligence Questionnaire (TEIQue-SF) (Laborde, Lautenback, Allen, Herbert, & Achtzehn, 2014; Perera & DiGiacomo,

2015; Siegling, Nielsen, Petrides, 2014), various adaptations of the Wong-Law Emotional Intelligence Scale (WLEIS) (Bao, Xue, & Fong, 2015; Hui-Hua & Schutte, 2015; Ju, Lan, Li, Feng, & You, 2015; Wang & Kong, 2014), and the Schutte Emotional Intelligence Scale (SEIS) (Cazan & Nastasa, 2015; Chhabra & Kaur, 2014). The reliability of these measures is considered good between 70-85 (Perez, et al., 2005), however Sulaiman and Noor (2015) found the WLEIS reliable from 0.83-0.92. What these measures have in common is the self-report method of each questionnaire. Self-report has been criticized as leading to bias from participants who may under-report behaviors deemed inappropriate and over-report appropriate behaviors distorting research data (Donaldson & Grant-Vallone, 2002). According to Donaldson and Grant-Vallone (2002), self-report bias is compounded using a single method of measurement typical in EI studies. Research to date has not shown quantitative studies using more than a single EI instrument or combining ability and trait measures. Although the use of a single measurement instrument for EI presents limitations to quantitative studies, the use of descriptive statistics or Statistical Package for the Social Sciences (SPSS) analysis produces standards by which research can be replicated and analyzed with similar studies (Learn Higher, 2008). Indeed, it is the limitation on the number of variables along with a greater number of subjects in a quantitative study that allows for generalizations within the topic being studied (Learn Higher, 2008).

EI has also been studied—although not as frequently, from a qualitative perspective. According to Yin (2016), qualitative research involves investigating the meaning of people's lives, viewpoints, cultural, environmental, and social conditions as experienced in real-world conditions, while carefully reporting the views and perspectives of the study participants. Qualitative research provides an in-depth look into the lives, perspectives, and environment of

those studied with a desire to explain a phenomenon, theory, or social condition. Qualitative research requires transparency, attention to detail and organization, and adherence to evidence (Yin, 2016).

Academic emotions and student engagement was the focus of Kahu, Stephens, Leach, and Zepke's (2015) qualitative study of 19 university students. Using pre- and post-semester interviews and video diaries Kahu et al. (2015) found emotions play a role in how students perceive instructor support, course design, and self-efficacy. Kahu et al. (2015) employed a thematic interpretive approach to analyze interview and video diary data, and found enjoyment and interest positively influence student success in learning. Conversely, boredom, frustration, and worry triggered disengagement (Kahu et al., 2015).

Qualitative design may also be used for program analysis as seen in Dagiene, Juskeviciene, Carneiro, Child, and Cullen's (2015) review of a pilot program implemented in schools to compare EI competency levels before and after training. A proposed limitation of qualitative studies is in the number of study participants. The Dagiene et al. (2015) study consisted of seven participants, which limited generalization and made it difficult to make systematic comparisons (Learn Higher, 2008). Patton (2002) submits there are no rules for sampling size in qualitative studies as long as data saturation, or sampling to the point of redundancy, is achieved. Small samples provide complete and accurate information if the study participants share common experiences with well-structured interview questions that ensure richness and thickness of data (Fusch & Ness, 2015).

A qualitative program review case study by Madalinska-Michalak (2015) consisted of 24 in-service teachers and confirmed good teaching requires emotional capacity to manage personal, work-related, and external policy challenges. Madalinska-Michalak's (2015) case study method

consisted of direct observation in the subject's natural setting, which allowed the researcher to delve closely into the topic being investigated (Yin, 2016). Through this comprehensive observation and interview process, Madalinska-Michalak (2015) confirmed the importance of emotions in creating suitable learning environments for students as well as confirming the lack of substantive training or support provided to in-service teachers.

Similarly, Buchanan, Prescott, Schuck, Aubusson, Burke, and Louviere (2013) found support and training to be instrumental to the success of 329 early-career teachers. Over four years, Buchanan et al. (2013) used semi-structured interviews in a longitudinal qualitative study to discern six common themes that contributed to early-career teachers' perception of success in teaching. Themes include: (a) collegiality and support, (b) student engagement and behavior management, (c) working conditions and teaching resources, (d) professional workload, (e) professional development, and (f) isolation (Buchanan, et al., 2013). According to Buchanan et al. (2013), the transition years from university to experienced teacher are critical in preparing new teachers for a sustainable long-term career in teaching. Training programs or mentorships focused on developing skills of resilience, reflection, responsiveness to self and others, relationships, and resourcefulness, are best for increasing teacher perception of support and well-being. Buchanan et al. (2013) confirmed teacher perception of feelings of support and autonomy might contribute to the desire to remain in the profession. Emotional intelligence and the ability to appraise emotions, regulate emotions, and use emotions creatively in self and others (Salovey & Mayer, 1990) may play a role in teacher performance, resilience, and continuance in the profession.

Training and development of EI competencies was found to be significant in pre-service teacher self-confidence, empathy, and self-awareness in a study by Lasauskiene and Rauduvaite

(2015). In a qualitative study of 23 pre-service music teachers (Lasauskiene & Rauduvaite, 2015) found underdeveloped skills of educational communication, insufficient self-confidence, and a lack of self-control skills, were the greatest determinants of pre-service teachers' perception of career longevity. Although instructors rated pre-service student EI higher than students' self-report interviews, the critical element appeared to be how students perceived their own emotional competency, which negatively affected their experiences (Lasauskiene & Rauduvaite, 2015).

EI competencies both actualized and perceived have been shown to heighten teacher performance and commitment to the profession. Chestnut and Cullen (2014), suggest EI is one piece of a threefold representation including self-efficacy and satisfaction with future work environments that aid in new teacher retention. Pre-service teacher self-efficacy expectations around classroom management, instructional strategies and pedagogy, and student engagement were highly correlated with motivation to continue in the teaching profession (Chestnut & Cullen, 2014). EI was found to be the greatest predictor of commitment to teaching and Chestnut and Cullen (2014) propose training and development of EI skills and competencies to be included in teacher education programs.

Synthesis of Research Findings

In synthesizing empirical information found in this literature review, four broad themes may be generalized: (a) EI in academic performance, (b) EI in life satisfaction, (c) EI in instruction, and (d) EI in teaching effectiveness and training. Academic performance may include grade achievement, task performance, student perception of skill attainment, and social engagement. Life satisfaction may include perceptions of support and feelings of burnout experienced by new teachers. Instruction and teaching effectiveness includes instructional

content and pedagogy and empathetic responsiveness to students as well as development of teacher EI through trainings designed to develop EI competencies in the classroom environment.

EI in academic performance. EI has been studied in relationship to academic performance both with K-12 and post-secondary students. Many studies have discovered significant links to predicting academic success (Lanciano & Curci, 2014; Qualter et al., 2011; Sepehrian, 2012; Wurf & Croft-Piggin, 2015), academic success in primary and secondary grades (Billings et al., 2014; Costa & Faria, 2015; Perera & DeGiacomo, 2013; Qualter et al., 2011), as well as university and university transition (Grehan, Flanagan, & Malgady, 2011; Perera & DiGiacomo, 2015; Sanchez-Ruiz, Mavroveli, and Poullis, 2012). EI and the link to pre-service teacher academic performance has been studied by Wurf and Croft-Piggin (2015) with engagement and motivation as the greatest predictors of academic performance and success. Mohzan, Hassan, and Halil (2013) investigated the level and influence of EI on academic achievement and found pre-service teachers to be deficient in EI skills with the capability to regulate emotions the lowest area.

EI in life satisfaction. EI has a role to play in life satisfaction and response to workplace stress and burnout. According to Wang and Kong (2014), mindfulness is robustly related to well-being and life satisfaction. Wang and Kong (2014) built on previous research allowing people with highly perceived EI were likely to report minor mental distress and greater life satisfaction. As mindfulness has been established as a trait that encourages people to accurately perceive and regulate emotions, Wang & Kong (2014) confirmed mindfulness to be positively related to greater life satisfaction via EI.

Bao, Xue, and Fong (2015) also linked mindfulness with EI and found it may act as a preventative to help reduce perceived stress as well as to regulate emotion. Bao et al., (2015)

propose training programs that develop mindfulness could also improve cognitive flexibility and problem solving, but caution additional longitudinal or experimental programs are needed to fully investigate the proposal. Similarly, Chhabra and Kaur (2013) found mindfulness served as a protective factor against stress. In this study, there was a higher correlation between mindfulness and EI in males than females, however for both males and females the negative correlation between stress and EI was great albeit higher for females (Chhabra & Kaur, 2013). Chhabra and Kaur (2013) contend EI allows people to cope effectively because they can better perceive and regulate emotions as well as mobilize social resources needed to adapt to environmental changes. Conversely, Holinka's (2015) study using a mixed method measurement with college students found a negative correlation between life satisfaction and stress, however no significant relationship was found between EI and life satisfaction. Stress and burnout of college students were the basis of Cazan and Nastasa's (2015) study to explore the role of burnout in the relationship between EI and life satisfaction. Building on a previous study by Nastasa (2010), in which the authors confirmed EI levels predict burnout, the new study suggests it may be possible to pre-identify those students at high risk of burnout and provide preemptive support in effectively coping with stress.

EI in instruction. In all levels of education, EI has been found to foster engagement in a classroom environment that sets a culture for learning. Abe (2011) found EI and positive emotions foster creative thinking and high-level personal and professional experiences through an online ability-based questionnaire and by measuring words used in describing practicum experiences. Kahu, et al., (2015) found enjoyment and interest played an important role in student well-being and positively influenced academic behavior and engagement, whereas negative emotions such as boredom, frustration, and worry contributed to disengagement. The

more students found the assignments enjoyable, the greater the online interactions and the higher the perceived performance (Kahu, et al., 2015). In a study of EI and gender, Sinha (2014) found there was no significance between EI and gender; however, there was an inverse negative correlation between EI and stress. Sinha (2014) posits students experience academic stress at predictable times during exams, grade competitions, and during heavy course loads, however students high in EI are more committed to work and perform better. Sinha (2014) contends that although most people have EI it is not used effectively because of self-perceived confidence in emotional ability.

Han and Johnson (2012) explored the social dimension of learning along with the emotional dimension, and discovered the more positive interactions students have, the less distance is perceived in online learning environments. Social bonding was positively associated with higher EI in that the more advanced the EI the more prominent the degree of social bonding, organizational effectiveness, and the ability to self-actualize (Allen, Ploeg, & Kaasalainen, 2012). In face-to-face instruction EI and stress can lead to stress contagion in the classroom. Oberle and Schonert-Reichl (2016) examined cortisol levels of students and teachers in a study of fourth- through seventh-grade students and found teachers with considerable levels of stress were less successful in teaching and classroom management, less likely to develop rapport with students, and were less content with work. Oberle and Schonert-Reichl's (2016) study was the first to posit teachers' occupational stress was connected to students' physiological stress regulation.

EI in teaching effectiveness and training. Teachers with strong emotional and social intelligence possess the ability to understand students better, which in turn promotes better performance from students (Arghode, 2013). Studies suggest EI training in developing teacher

self-understanding and awareness is pivotal in teacher professional development (Arghode, 2013). Dolev and Leshem (2016) found in their mixed method longitudinal study of 21 veteran teachers that teacher training in social and emotional understanding enhanced awareness of EI. The authors listed this awareness as the most important gain of the study. One participant shared:

I see it more often now...the role emotions play in almost every class situation...I now stop the lesson and together we discuss their feelings. I have come to realize negative emotions interfere with learning and I should acknowledge students' emotions, even at the expense of my original lesson plans. (Dolev & Leshem, 2016, p. 84)

Awareness and training appear to make the difference in the effective use of emotional competencies in the classroom. Turculet (2015) investigated skills projected to be required of teachers of future generations of new learners and found emotional literacy skills to be paramount to fostering creative and innovative thinking. Turculet (2015) uses the term "emotional mentor" (p. 994) to describe the need to educate attitude and teach essential lessons in life within the partnership of parents, schools, and community. Vesely, Saklofske, and Nordstokke (2014) advocate EI training programs to increase pre-teacher resiliency, self-efficacy, and well-being. To negate the force of burnout and other occupational stress in the teaching profession, Vesely et al. (2014) found EI can be developed through specific programs that aim to enhance stress management and increase teacher well-being and classroom performance. Significant relationships between instructor EI, personal leadership competency, and overall self-management and successful teaching were noted in studies by Hassan, Jani, Som, Hamid, and Azizam (2015) and Shahid, Jani, Thomas, and Francis (2015). Hassan et al. (2015) conclude EI skills should be a component of instructor professional development

programs to facilitate clear communication, build relationships as well as in leading and supporting others.

In a qualitative study of 24 pre-service teachers, Madalinska-Michalak (2015) found teachers must be aware of the emotional component of their jobs to create healthy classroom environments that support learning. Skill is needed to build authentic teacher-student relationships and to develop emotional competence (self and others), which will increase student learning while reducing teacher attrition rates (Madalinska-Michalak, 2015). A study of 209 pre-service teachers by Chestnut and Cullen (2014) confirmed pre-service teacher personal and environmental expectations play a role in sustained commitment to the profession. Specifically, self-efficacy areas of classroom management, instructional pedagogy, and student engagement were positively correlated to teacher motivation to remain in the profession, and those with greater emotional awareness demonstrated the highest levels of commitment.

Critique of Previous Research

EI constructs. EI has been studied from three primary constructs: the ability model, the trait model, and mixed methods that include core EI characteristics with personality traits. EI has been studied in business, education, and personal success in life. EI theories from the business perspective are generally addressed from the trait or mixed method framework while studies focused on educational pursuits tend toward the ability framework (Concoran & Tormey, 2012; Han & Johnson, 2012; Lanciano & Curci, 2014; Salovey & Mayer, 1990) or mixed method (Chestnut & Cullen, 2014; Hassan, Jani, Som, Hamid, & Azizam, 2015; Vesely, Saklofske, & Nordstokke, 2014; Yin, Lee, Zhang, & Jin, 2013).

Most studies focus on a single EI construct with self-report measurement tools the norm for gathering data in TEI and mixed models. The MSCEIT is the instrument frequently used in

studies dedicated to the ability model of EI. In EI studies focused on business, self-reported EI is higher than performance based EI measures (Lasauskiene & Rauduvaite, 2015; Sheldon, Ames, & Dunning, 2014). A review of the literature has shown a majority of education studies have been quantitative providing correlations between EI and academic achievement, burnout, life satisfaction, and classroom climate, whereas qualitative studies primarily focus on student and teacher perceptions of EI competency or training programs. Using instruments specific to each EI model, DeFabio and Sakofske (2014) examined the role of fluid intelligence and personality traits: the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) for ability EI, the Trait Emotional Intelligence Questionnaire (TEIQue) for trait EI, and the Emotional Quotient inventory (EQ-i) for mixed EI. Descriptive statistics confirmed the association between self-report EI and core self-evaluation, resilience, and life satisfaction supporting the conclusion that EI traits are positively related to higher achievement in academics and well-being (DeFabio & Sakofske, 2014). It has been advanced in this literature review that EI awareness of self and others is important to the practice of teaching in both instruction and in maintaining life satisfaction (Arghode, 2013; Dolev & Leshem, 2016; Hafiz & Chouhan, 2015; Han & Johnson, 2012; Madalinska-Michalak, 2015), but has not been investigated qualitatively. At the time of this study's development, qualitative studies dedicated to pre-service teacher perception of instructor EI were not been found by the researcher.

Based on this review of literature, which developed a unique conceptual framework using EI theory to understand how EI influences student academic performance, teaching, and life satisfaction, there was sufficient reason to believe an investigation examining the impact of instructor EI on pre-service perception and understanding of EI competencies would contribute important findings to current empirical literature on EI in education. It has therefore been

established that the literature review provided robust support for pursuit of a research project to responding to the following research questions:

- RQ 1: How do pre-service teachers in a state college teacher preparation program perceive the nature of instructor EI?
- RQ 2: How do pre-service teachers perceive EI competencies in self and others?
- RQ 3: What instructional (cognitive) and/or relational (affective) attributes are most associated with instructor EI?

Chapter 2 Summary

In summary, the literature review presented a growing body of empirical research on EI in education as related to both instructors and students. Research cited the importance of EI in student academic performance, workplace flourishing and life satisfaction, and in teaching effectiveness. Developing EI competencies and skills has been found to increase academic performance, reduce teacher burnout, and contribute to perceptions of support in early career teachers. The body of research cited provided a foundation for the study of EI competencies and traits associated with increased teacher effectiveness and workplace satisfaction and addressed a need to develop EI skills in pre-service and veteran teachers.

The purpose of this study was to explore pre-service teacher perception of instructor EI in a state college teaching program. To facilitate this learning, a qualitative case study exploration of pre-teacher perception of EI competencies was conducted. This study examined the strengths, weaknesses, and applicability of prior research methods and methodologies, and how prior studies have minimized risk and maintained ethical standards, feasibility, and justified appropriateness of design.

Chapter 3: Methodology

Introduction to Chapter 3

EI awareness of self and others is important to the practice of teaching in instruction, in maintaining life satisfaction, and reducing teacher burnout. Ability EI refers to emotional adeptness from a cognitive viewpoint while trait EI addresses the ability to process emotional information from a personality frame of reference (Ju, Lan, Li, Feng & You, 2015). Cazan and Nastasa (2015) found high levels of EI in teachers were correlated with diminished levels of anxiety, stress, and burnout. Comparably, low levels of EI in teachers have been associated with student stress and lower achievement as well as teacher burnout (Oberle & Schonert-Reichl, 2016).

Burnout associated with heavy demands in workload and the teaching environment (Ju et al., 2015), combined with limited perceived administrative and peer support (Haynes & Maddock, 2014) has been found to contribute to the exodus of early career teachers within the first five years of entering the profession (Maxwell, 2016). Houghton, Wu, Godwin, Neck, and Manz, (2012) found individuals with extensive EI perceive work environments as more supportive and feel empowered to greater decision-making and control over work events. The relationship between EI competencies with teacher performance and well-being has been shown significant in teacher perception of success in the workplace, and research indicates experiential teaching methods focused on developing social-emotional competencies may increase EI in undergraduate students (Kasler, Hen, & Nov, 2013). In seeking to understand pre-service teacher perception of EI in self and instruction the following research study was conducted.

Purpose and Design of the Study

According to Yin (2014), case study research answers ‘how’ and ‘why’ questions about contemporary issues that do not require manipulation of behavioral events. Yin (2014) proposes five components are essential to all case studies including the study’s questions and propositions, analysis components, logic linking data to the propositions, and criteria for interpreting the findings. For this study of perceptions and feelings, a qualitative methodology provided an intense and in-depth inquiry into participants’ real-world experiences. This study focused on EI competencies, specifically self- and social-awareness, use of and regulation of emotions, and how EI may hold promise in emotion management of pre-service teachers.

The purpose of this single case study with embedded units of undergraduate education students in a southeastern state college was to contribute to current research on the value of EI in student instruction, achievement, and pedagogy. Yin (2014) proposes five rationales for single case study design including having a “crucial, unusual, common, revelatory, or longitudinal” circumstance (p. 51). A single case study design was selected for this study to capture the conditions of an everyday situation, specifically that of pre-service teachers engaging in common study, and with that, the perceptions and emotions apparent in a naturalistic academic environment. An embedded single case study was used to analyze subunits within a case and included quantitative analyses to corroborate themes, concepts, and ideas found during data collection to add to the study’s construct validity (Yin, 2014). This study explored a variety of impressions and perceptions about EI awareness and understanding, thus a single case study design with embedded units was selected to provide the researcher the opportunity to collect evidence from multiple subunits within a target population.

Whereas current research has focused on EI from specific frameworks (ability, trait, and mixed) and specific demographics (student, faculty, and organization), the current study had three main goals. The first goal was to explore how pre-service teachers perceived the nature of instructor EI specifically in the areas of emotional appraisal of others and the use of and regulation of emotions. The second goal was to investigate pre-service teacher understanding of EI competencies in self and others. The final goal was to explore affective and cognitive attributes most highly associated with instructor emotional intelligence.

A review of literature offered studies linking EI to academic performance (Perera & DiGiacomo, 2013; Qualter, Gardner, Pope, Hutchinson, & Whiteley, 2011; Sepehrian, 2012), life satisfaction (Cazan & Nastasa, 2015; Holinka, 2015; Schutte, 2014), and instruction and pedagogy (Abe, 2011; Hassan, Jani, Som, Hamid, & Azizam, 2015; Vesely, Saklofske, & Nordstokke, 2014), however a review of methodologies yielded a majority of studies utilizing a quantitative design. This study focused on a gap in the literature in pre-service teacher perception of instructor EI from a qualitative case study framework. A qualitative case study framework was chosen to allow for a more in-depth understanding of the phenomenon (Yin, 2014). Whereas quantitative studies provide measurable data using statistical analysis, qualitative designs are useful for exploration of a phenomenon within a real-life context (Baxter & Jack, 2008). This descriptive case study investigated the phenomenon of pre-service perception of instructor EI through interview, observation, and an online survey using constructs of the four-branch ability model of EI (Mayer, Caruso, & Salovey, 2016) and components of trait emotional self-efficacy (Perera, 2016).

Research Questions

The aim of this qualitative study was to explore pre-service teacher perception of instructor EI under real-world conditions. Qualitative studies are preferred when the purpose of research is to depict the views and perspectives of individuals in real-world contextual situations with minimal intrusion of artificial research procedures (Yin, 2016). In qualitative studies, research questions are presented in commonplace and broad ways to best learn from participants' experiences (Creswell, 2012). The intent of qualitative studies is to explain social behavior and thinking through existing or emerging concepts, with data collection, integration, and presentation from multiple sources of evidence being integral to a rigorous qualitative study (Yin, 2016). Yin (2014) proposes research questions focused on answering 'how' or 'why' are more explanatory in nature and lend themselves to qualitative case studies when focused on an extent set of events over which the researcher has limited or zero influence.

This study focused on specific factors of the ability model of EI within the Wong and Law Emotional Intelligence Scale (WLEIS). The four factors of the WLEIS include: OEA- Others' Emotional Appraisal, ROE-Regulation of Emotion, SEA-Self Emotional Appraisal, and UOE-Use of Emotion (Karim & Weisz, 2011; Sulaiman & Noor, 2015).

- RQ 1: How do pre-service teachers perceive the nature of instructor EI in a state college teacher education program? (OAE)
- RQ 2: How do pre-service teachers perceive EI in self and others? (OEA, SEA)
- RQ 3: What instructional (cognitive) and/or relational (affective) attributes are most associated with instructor EI? (OEA, UOE)

Research Design

Qualitative research is conducted to investigate the everyday lives of different types of people and perspectives under different circumstances and in different situations (Yin, 2016). Creswell (2013) contends qualitative approaches are most fitting in contexts where a researcher seeks to explore individual stories and voices, to follow up on existing quantitative research, or is interested in developing theories of social engagement. According to Creswell (2013), there are five approaches to qualitative research including: (a) narrative research, (b) ethnographic research, (c) phenomenological research, (d) grounded theory research, and (e) case study. Narrative research designs describe the lives of individuals by collecting stories about people's lives, while grounded theory research moves beyond description to generate theories based on common, shared experiences of a population (Creswell, 2013). Phenomenological research describes the common understanding of lived experiences for a group of individuals of a particular concept or phenomenon (Creswell, 2013). An ethnographic research design targets an entire culture-sharing group and describes, analyzes, and interprets mutual patterns of beliefs, behaviors, and language that develop over time (Creswell, 2012). According to Creswell (2013), a case study explores a real-life bounded system over time through extensive, comprehensive data collection involving diverse information assembly. Merriam (2009) maintains a bounded system is crucial in identifying and delimiting the object of the case. A case study may be explanatory or exploratory and may be utilized in both qualitative and quantitative studies (Creswell, 2013).

Yin (2014) asserts case study research is used to understand phenomena associated with individual, group, social, and political fields from a holistic perspective over which the researcher has minimal or zero control. It is a comprehensive methodology encompassing the

“logic of design, data collection techniques, and specific approaches to data analysis” (Yin, 2014, p. 17). As with other research designs, case study research must incorporate procedures to guard against threats to validity, preserve a chain of evidence, and investigate and test variant conclusions (Yin, 2014). Bounding a case study by time, space, and process provides a framework for describing and analyzing case units (Merriam, 2009). This study utilized a descriptive case study research design with embedded units of analysis including both holistic data collection and an EI survey which provided a deeper understanding of the research questions and explored a phenomenon within its natural settings (Yin, 2014). According to Yin (2014), case studies should include multiple data sources to converge in a triangulating fashion for in-depth analysis of the phenomenon in context. A descriptive case study with embedded units examined the real-life experiences of pre-service teachers in a state college teacher preparation program specifically in how these pre-service teachers perceived instructor EI (Baxter & Jack, 2008). The rationale for selecting a descriptive case study with embedded units supported the opportunity to examine multiple units (pre-service teachers) within a single institution of higher learning during a specific semester of study through prescribed data measurement tools. In capturing pre-service teacher perceptions of instructor EI while engaged in common study, this study provided insights and understandings about EI theory in education and is aligned with Yin’s (2014) rationale for single case design in a bounded system.

A mixed model of EI incorporating the ability or four-branch model of EI (Mayer et al., 2016) with traits associated with emotional self-efficacy provided the framework for measurement instruments in this study. Mayer, Salovey, and Caruso (2004) submit there is a hierarchal order to the branches in that perception and expression of emotion (Branch 1) and using emotions to advance thought (Branch 2) must be present to understand emotion (Branch 3)

and to manage emotion (Branch 4). Trait and mixed EI models add noncognitive competencies to ability model cognitive structures imperative to successful coping and resilience in difficult situations (Cho, Drasgow, & Cao, 2015). Baxter and Jack (2008) suggest a constructivist lens is preferred when the mission of a study is to answer 'how' or 'why' questions (p. 544) and when manipulation of participant behavior is not purposed. Data was collected from pre-service teachers based on their perception of a phenomenon in a naturalistic environment according to identified research questions. Multiple sources of data were collected and analyzed through semi-structured interview, observation, and survey analysis to add credibility and to check the consistency of the data gathered (Patton, 2002). Eisenhardt (1989) proposes a combination of both quantitative and qualitative data sources be used in a case study as corroborating quantitative evidence may strengthen qualitative evidence as well as reinforce underlying theories or relationships. Yin (2014) suggests the addition of quantitative components to qualitative research allows the researcher to investigate more complex research questions, collect more robust evidence, and analyze concurrent data on the phenomenon under study. Case study propositions follow in Table 3.

Table 3

Case Study Propositions

Propositions	Source
Emotional intelligence is important to student success in academic performance.	<p>Sanchez-Ruiz, M.J., Mavroleli, S., & Poullis, J. (2012). Trait emotional intelligence and its links to university performance: A meta-analytical review. <i>Learning and Individual Differences</i>, 28, 20-33. doi: 10.1016/j.lindif.2013.08.002</p> <p>Sepehrian, F. (2012). Emotional intelligence as a predictor of academic performance in university. <i>Journal of Educational Sciences and Psychology</i>, 2, 36-44.</p>
Instructor EI plays a role in fostering student engagement and perceived success.	<p>Oberle, E. & Schonert-Reichl, K.A. (2016). Stress contagion in the classroom? The link between classroom teacher burnout and morning cortisol in elementary schools. <i>Social science and medicine</i>, 159, 30-37.</p> <p>Onen, A.S. & Ulusoy, F.M. (2015). The relationship between pre-service teachers' self-esteem and emotional intelligence levels. <i>Procedia Social and Behavioral Sciences</i>, 186, 1163-1168.</p>
High levels of EI have been associated with increased life satisfaction and reduced workplace burnout.	<p>Dawson, S., Lettler, L., Burton, C., & Galletly, C. (2012). Do people with schizophrenia lack emotional intelligence? <i>Schizophrenia Research and Treatment</i>, 2012, 108.</p> <p>Schutte, N., & Loi, N. (2015). Connections between emotional intelligence and workplace flourishing. <i>Personality and Individual Differences</i>, 66, 134-139.</p> <p>Wang, Y., & Kong, F. (2014). The role of emotional intelligence in the impact of mindfulness on life satisfaction and mental distress. <i>Springer Science-Business Media</i>, 116, 843-852. doi: 10/1007/s11205-013-0327-6</p>

Note. Case study propositions.

Research Population and Sampling Method

This study utilized an operational construct sampling of pre-service teachers to gain an in-depth understanding of pre-service teacher perception of instructor EI (Patton, 2002).

Operational construct sampling is a purposeful sampling method that allows the researcher to select real-world examples of the phenomena for study (Patton, 2002). According to Patton (2002), there are no rules for sampling with qualitative studies. Marshall, Cardon, Poddar, and Fortenot (2013) concur sampling should be guided by what the researcher purposes to discover, the intent of the inquiry, and what can be accomplished with available time and resources, however saturation, or sampling to the point of redundancy for study replication, is the ideal for basic research and enhances the reliability of study results. The saturation point in qualitative research, where no new information is found, typically occurs in samples of 10 to 15 participants (Marshall et al., 2013). Guest, Bunce, and Johnson (2006) submit saturation is the point in a study where no new data, themes, or coding may be found, and the study may be replicated. In research studies where the objective is to explore collective perceptions and experiences among a group of comparatively homogeneous individuals, Guest et al. (2006) found 12 interviews to be the point of saturation, although saturation can be realized through as few as six interviews. However, Guest et al. (2006) caution 12 interviews may not be enough if the sample is considerably heterogeneous, the data quality is substandard, and/or the domain of inquiry is ambiguous. When assessing disparity between unique sample groups or the correlation between variables, larger samples are suggested (Stoica & Rosana, 2013).

Romney, Batchelder, and Weller (1986) found small samples provide thorough and factual information within a specific cultural context if the population possesses some degree of expertise within the area of research. The more universally disseminated an experience or

domain of knowledge, the fewer participants are necessary to provide a clear picture of the phenomenon of interest (Fusch & Ness, 2015). Romney et al. (1986) found samples as small as four participants can provide veritable information with a high confidence level (.999) if they command a high degree of cultural competence in the area of study. Consensus theory as posited by Romney et al. (1986) suggests experts tend to agree more with each other than do novices, and these experts share common experiences that comprise truths for each expert. Required conditions for consensus theory are that participants respond to questions independently of one another and that the questions asked constitute a coherent body of knowledge.

Burmeister and Aitken (2012) concur data saturation is not only about numbers but also about the richness and thickness of the data with well-structured interviews as one method of reaching data saturation. Richness of data is the quality of the data and thickness denotes the quantity of the data (Fusch & Ness, 2015). Robust interview questions are the key to data quality, and great care should be given in developing structured or semi-structured questions that deal with knowledge rather than experiences (Fusch & Ness, 2015). In addition, Fusch and Ness (2015) advise creating similar interview experiences for multiple participants including persons outside the ideal to avoid the “shaman effect” whereby persons with expert knowledge about a topic unintentionally or intentionally dominate gathered evidence (p.1410). Methods researchers may use to ensure saturation include development of a saturation grid, second party coding for transcripts, and avoidance of using single phenomena that may skew data and affect validity and transferability of study results (Fusch & Ness, 2015). Even with safeguards in place, Fusch and Ness (2015) recommend conducting further interviews with deeper samples if unique information is gleaned in the final analysis. According to Fusch and Ness (2015), there is a connection between data triangulation and data saturation in that data triangulation ensures data

saturation. There are four types of triangulation addressed by Fusch and Ness (2015) for social research including: (a) data triangulation for correlating people, time, and space, (b) investigator triangulation for correlating findings from multiple researchers in a study, (c) theory triangulation for using and correlating multiple theories, and (d) methodological triangulation for correlating data from multiple data sources (p.1411).

Guest et al. (2006) concur if the research objective is to illustrate a mutual perception, belief, or behavior among a comparatively homogeneous group, then a sample of 12 will feasibly be sufficient. This study selected 12 participants from a target population of 3rd and 4th year education students at a southeastern state college according to a common criterion for purposive samples. Care was given to ensure participants were selected within a specific cultural context with a high degree of cultural competence gleaned from shared courses of study. The intent was to draw the sample from both traditional and non-traditional students with genders responsibly represented. However, due to demographic constraints with student enrollment, equality in gender and demographics was not feasible. Guest et al. (2006) recommend selecting participants with similar experiences with respect to the research domain as saturation will occur much sooner. The final sample of study participants were a relatively homogeneous group who met the four basic criteria: (a) educational institution, (b) educational program, (c) at least half-time student, and (d) participation in at least one face-to-face instructor led course. As 3rd and 4th year pre-service teachers, participants shared cultural competence based on collective learning experiences encountered throughout the program, and as the research objective was to explore a collective perception, belief, or behavior within a homogeneous group, a purposive sampling of twelve participants was appropriate for this study.

Instrumentation and Data Collection

Interview, observation, and survey were utilized to collect data for this study. According to Yin (2014), the strength of interviewing for evidence revolves around the depth of targeting case study topics as well as the ability to gain insight on participant views, perceptions, and attitudes. Weaknesses with interview evidence can come from interviewer bias and poorly articulated questions, errors in recall, or participants skewing data based on sharing what they believe the interviewer wishes to hear (Yin, 2014). Semi-structured interview questions were developed from the Trait Emotional Intelligence Questionnaire (TEIQue) to gather responses from each of the four factors of EI including emotionality (EM), self-control (SC), sociability (SO), and well-being (WB) (Cho et al., 2015). TEI or trait self-efficacy refers to self-perceived abilities regarding emotions within fifteen categories (Cho et al., 2015). Questions were developed through an interview protocol to specifically address components of emotional self-awareness, emotion perception, emotion understanding, and interpersonal sensitivity (Cho et al., 2015). Field-testing of the study questions was conducted to ensure accuracy, open-endedness, neutrality, and clarity (Turner, 2010). Responses and critical feedback from field testing was incorporated into the final interview question protocol to study participants.

Observation in naturalistic conditions was conducted to better understand the context within which the participants interact and to observe visual events that may have escaped awareness of those familiar with the setting (Patton, 2002). The physical and social environment in which pre-service teachers engage in study may contain information of participant decision-making patterns and frequency of communication not manifest from the interview or survey. Patton (2002) suggests qualitative observations should be attentive to nonverbal modes of communication that may provide contextual clues as to environmental climate and participant

engagement. Patton (2002) cautions researchers about the danger of misinterpretation of body language and nonverbal communication and follow up is suggested to verify accuracy of gathered observational evidence.

EI theory is predicated on two constructs including the ability model and the trait or mixed model. Ability EI is assessed through tests of maximal performance and are generally correlated with cognitive-emotional measures (Cho, et al., 2015). This study utilized the Wong and Law Emotional Intelligence Scale (WLEIS) to obtain data on the four domains of EI as presented by Mayer et al. (2016). The WLEIS is a self-report instrument of 16 items rated on a 7-point Likert scale developed to explore the role of EI in leaders and followers (Cho, et al., 2015). Sulaiman and Noor (2015) determined the WLEIS valid based on validation analysis of construct and criterion validity. Reliability was satisfactory with the Cronbach alpha coefficient ranging from 0.83 to 0.92 in all degrees of the scale (Sulaiman & Noor, 2015). The WLEIS was selected for this study for its clarity and focus on the four domains of EI: a) appraisal of self-EI, b) appraisal of others' EI, c) regulation of emotion (self), and d) use of emotion (Sulaiman & Noor, 2015).

To increase credibility through comparative analysis, multiple forms of evidence were collected to check for consistencies and inconsistencies in results (Patton, 2002). Methodological triangulation through semi-structured interview, observation, and survey, was utilized for data collection with analysis of complementary and divergent areas to crosscheck and provide for a well-rounded study (Patton, 2002). According to Yin (2014), the use of multiple data sources not only affords a researcher a broad landscape of behavior issues but also allows for converging lines of inquiry. Fusch and Ness (2015) agree and add data triangulation is the vehicle by which data saturation comes to fruition and ensures data is rich in depth. The

resulting convergent evidence provided by the multiple measures of the same phenomenon strengthens the construct validity of a study (Yin, 2014).

Identification of Attributes

Four components of EI provided the foundation for attributes in this study. These components included emotional self-awareness, emotion perception, emotion comprehension, and interpersonal sensitivity. Emotional self-awareness is the capacity to recognize and understand emotions in self and resides at the lowest levels of the ability model of EI (Mayer, et al., 2016). Emotional self-awareness is a fundamental competency to attain higher levels of EI including emotion management and regulation (Mayer, et al., 2016). Authentically perceiving emotions in self and others involves attention to details present in the environment from inner physiologic cues to observation of body language and verbal cues. With that, understanding emotion requires recognizing emotions in self and others and making meaning from known experiences. Interpersonal sensitivity is a trait EI component realized in social situations. This study used a Wong-Law EI survey to provide information as to pre-service teacher self-awareness and understanding of emotions. Interpersonal sensitivity is the capability to accurately read others' abilities, states, and traits from nonverbal cues and then use this information in decision-making or to solve problems (Liang, Shih, & Chiang, 2015). Semi-structured interview questions and classroom observation contributed data for this portion of the study. Full definitions of the study attributes are identified below.

Attributes of ability EI include perceiving emotions, facilitating emotions, understanding emotions, and managing emotions. The following trait EI competencies are included as personality attributes important to teaching: self-awareness, resilience, motivation, and interpersonal sensitivity.

Ability emotional intelligence. This term refers to the four-branch model developed by Mayer et al. (2016) that describes domains of emotional intelligence.

Perceiving emotions. This attribute refers to the ability to accurately recognize emotions in others and express one's emotions (Cho et al., 2015).

Facilitating emotions. This attribute refers to the capacity to use emotion to achieve goals by enhancing cognitive function (Cho et al., 2015).

Understanding emotions. This attribute refers to the capability to recognize the causes of certain emotions and the relations among them (Cho et al., 2015).

Managing emotions. This attribute refers to the capacity to control emotions in self and others to bring about successful conclusions (Cho et al., 2015).

Trait emotional intelligence (TEI). This term refers to a mixed model of EI that incorporates the four branches of ability EI as well as motivation, personality, temperament, character, and social skills (Cho et al., 2015). TEI has also been characterized as trait emotional self-efficacy (Costa, Petrides, & Tillmann, 2014), and involves emotional self-perceptions located at lower levels of personality classifications (Petrides, 2011).

Self-awareness. This attribute refers to the capability to control and understand one's own feelings (Dulewicz & Higgs, 1999).

Resilience. This attribute refers to the ability to work under pressure and to cope with changing demands (Dulewicz & Higgs, 1999).

Motivation. This attribute refers to the amount of energy and effort one is prepared to expend to achieve goals (Dulewicz & Higgs, 1999).

Interpersonal sensitivity. This attribute refers to one being aware of others' needs and feelings with the ability to use emotions effectively in interactions and decision-making (Dulewicz & Higgs, 1999).

Data Analysis Procedures

According to Yin (2014), analyzing case study data is difficult because there are no well-defined rules or steps for the researcher to follow. One strategy offered by Yin (2014) is to focus on the theoretical propositions that guide a study and to align data according to themes across the embedded cases. Inductive analysis of emerging patterns, themes, and categories was accomplished through a social constructivist lens focused on deep understanding of how individual experiences affect one's behavior and actions (Patton, 2002). Atlas.ti, computer-assisted qualitative data analysis software, was used to code and categorize narrative data for analysis (Yin, 2014). Survey data including student demographic information and completed WLEIS instruments was statistically analyzed to discern similarities and correlations of responses within classes, and age of respondents.

Interviews and observations provided an in-depth analysis of pre-teacher perception of EI in self and others. Multiple perspectives were gathered on shared experiences through interview and observation, however each experience proved to be as unique as the participant. Coding for qualitative data focused on the four broad domains of ability EI including emotion perception, emotion facilitation, emotion understanding, and emotion management (Cho, Drasgow, & Cao, 2015). Additional coding was applied to specific experiences of self-awareness and interpersonal sensitivity as evidenced by interview responses and observation. Yin (2014) maintains pattern-matching logic to be a preferred analysis technique for qualitative studies. Pattern matching compares an empirical based pattern with a hypothesized pattern developed

prior to a study. If both patterns produce comparable results, the study is deemed valid. Once the themes and patterns are fully identified within each case, analysis across the cases will be conducted to fully understand the depth and breadth of EI in pre-service teacher education.

Limitations and Delimitations of the Research Design

Limitations to this study include the lack of generalizability of the study results, as this study was conducted at one unique state college location in Central Florida. This case study involved the perspectives of one group of pre-service teachers and may not reflect the behaviors of similar groups of pre-service teachers. Additional limitations may include the self-report method of surveys and participant experiences, or biases that may factor in response to interview questions. Patton (2002) contends observational data may constrain data due to observer bias or a limit on what an observer can see. Research has indicated EI is developed over time with age and experience (Dumitriu, Timoft, & Dumitriu, 2014). Due to this study being conducted in a state college setting with a large percentage of non-traditional degree seeking students, the median age of pre-service teacher participants was reflective of the overall student demographic. The study sample was drawn from the target population of both traditional and non-traditional students thus initial EI levels varied within the study sample.

Delimitations for this study include the use of volunteer participants in a teacher education program at a single site. Other teacher education programs were not represented in this group of participants. This study was meant to explore pre-service teacher perception of instructor EI through a case study design by which smaller sample populations are the norm. The use of specific measurement tools and analysis methods by the researcher were selected to identify critical EI components for pre-service teachers, which may not be applicable to other professions. It is suggested additional studies be conducted using longitudinal methods with

alternate measurement tools to follow pre-service teacher progress throughout the first years of teaching.

Validation

Credibility and dependability. Yin (2014) submits there are four criteria to judge the quality of case study research. These tests are applied throughout the case study and Yin (2014) includes specific approaches for each design test. The tests pertain to a study's construct validity, internal validity, external validity, and reliability (Yin, 2014). Construct validity was addressed through the use of multiple sources of data including semi-structured interviews, observations, and an EI survey. Credibility of this study was assured through triangulation of data sources including interview, observation, and survey data (Patton, 2002). The research participants were asked to review interview transcripts and the draft case study report (Patton, 2002). Internal validity was addressed in data analysis through pattern matching and explanation building (Yin, 2014). External validity was addressed in sampling protocol through sample selection in a specific course of study. In addition, utilization of an interview protocol to develop semi-structured questions and an observation checklist allowed for comparison of experiences across all participants. Inclusion of a standardized EI measurement tool provided confirmatory evidence to strengthen validity.

According to Yin (2014), theory development is used in single case study design. EI theory provided the framework for this inquiry with the intention of advancing empirical research on the topic of how pre-service teachers perceive instructor EI. Reliability was addressed using a case study protocol, semi-structured interview questions, and the compilation of a case study database to formally record data gathered throughout the case study investigation (Yin, 2014). Dependability of the findings was assured through an audit trail and external audit

process to ensure data was presented in a manner clearly supported by data (Lincoln & Guba, 1985).

Expected Findings

A review of literature found EI has a positive effect on workplace success, satisfaction with life, and academic achievement (Costa & Faria, 2015; Holinka, 2015; Schutte & Loi, 2015). Specific to teaching EI has been shown to mediate the effects of perceived social support, emotional self-efficacy, and empathy (DiFabio & Kenny, 2015; Kasler, Hen, & Nov, 2013). Emotional intelligence has also been shown to improve the social and emotional climate of classrooms and increase teacher resiliency and well-being (Curci et al., 2014; Rivers, Brackett, Reyes, Elbertson, & Salovey, 2013; Vesely, Saklofske, & Nordstokke, 2014). However, few EI studies have approached the topic of pre-service teacher perception of instructor EI, and at the time of this study, no studies have used a qualitative method. This study filled a gap in pre-service teacher awareness of EI in self and others specifically with instructor EI, and how an understanding of EI may enhance classroom instruction and contribute to workplace success.

Ethical Issues in the Study

Participants were selected equitably from a target population of both traditional and non-traditional pre-service teachers so as no persons were unfairly included or excluded from the study. No form of deception was employed in gaining cooperation of study participants and anonymity was granted to study participants (Yin, 2014). Details of the research project were explained to all participants with assurance that participation was voluntary, and participants could withdraw at will. Informed consent was collected from all participants with information of the study's purpose and a statement of privacy and confidentiality (Yin, 2014). The results of this study were offered to participants for review if requested.

Researcher's position. Patton (2002) asserts the researcher is the instrument in qualitative studies, and as such the experience, training, and perspective of the researcher affects the credibility of the study. As a former elementary classroom teacher and current school administrator, the researcher brings substantial experience in educational practices and pedagogy. The researcher has found EI is important for school leaders to inspire a shared vision for staff goal attainment and student achievement. However, the objectivity of the researcher may be perceived a possible limitation due to the researcher's predispositions or biases about EI (Patton, 2002). Given this understanding, the researcher was mindful of possible predispositions toward the research topic and conducted the study objectively with intellectual rigor, professional integrity, and methodological competence (Patton, 2002). The researcher attended the state college 17 years ago but had no current professional relationship with instructors or students, including student interns at this time of the research study. There were no personal or financial connections affiliated with the research site. The intention of the study was to add to the knowledge base of EI in educational practices.

Chapter 3 Summary

EI is the cognitive ability to perceive, use, understand, and manage emotions in self and others (Mayer, Salovey, & Caruso, 2004). EI has been shown to have a positive effect upon academic achievement for students as well as increase workplace satisfaction and decrease burnout in early career teachers. However, it was not known how pre-service teachers perceived instructor EI in course content and pedagogy. This descriptive case study of embedded units explored how pre-service teachers' perceived instructor EI as well as EI in self and others. The study data was gathered through semi-structured interviews according to an interview protocol, observation, and an EI survey from 12 voluntary participants who signed an informed consent

form. Thematic coding and pattern matching of observational and interview data was conducted, and survey data was analyzed via SPSS. This study filled a gap in pre-service teacher perception of EI in self and others and how EI may contribute to student academic success and increased satisfaction with life.

Chapter 4: Data Analysis and Results

Introduction

According to Sutcher, Darling-Hammond, and Carver-Thomas (2016), the years between 2009 and 2014, saw teacher education enrollments drop from 691,000 to 451,000, a 35% reduction in the teaching profession. Sutcher et al. (2016) cite the following reasons for the increasing attrition including, “dissatisfaction with administration; testing and accountability pressures; dissatisfaction with the teaching career; or unhappiness with working conditions” (p.4). Additionally, teachers with little preparation leave teaching at a rate two to three times higher than those expansively prepared, and teachers who feel unsupported by administration and collegial groups are more than twice likely to leave as those who feel well supported (Sutcher et al., 2016). Recommendations to improve teacher retention from Sutcher et al., (2016) include developing robust mentoring and induction programs for new teachers, creating productive school environments with administrative support and collaborative planning with peers for all teachers, and training programs to develop principals in creating productive teaching and learning environments in which teachers will want to remain.

This qualitative case study investigated the real-time experiences of 12 pre-service teachers in a state college teacher preparation program specifically in exploring instructor emotional intelligence in content and pedagogy. According to the Yale Center for Emotional Intelligence (2013), emotions matter in student education. Emotions contribute to how one perceives learning, educational decision-making and problem solving, as well as how one treats self and others (Yale Center for Emotional Intelligence, 2013). This chapter provides a description of the sample and an overview of the research methodology and analysis. The study findings will follow with a presentation of the data and results gleaned from the data.

Description of the Sample

This study utilized an operational construct sampling of pre-service teachers to gain an in-depth understanding of pre-service teacher perception of instructor EI (Patton, 2002).

Operational construct sampling selects participants based on their potential representation as real-world constructs of the phenomenon being explored (Patton, 2002). Upon receiving Institutional Review Board (IRB) approval from both research sites, two classes at the college were selected based on identified criteria in which to recruit participants. Total population of the two classes was 34 students who were all 3rd or 4th year students in the same teacher education program, at least half-time students, and participated in at least one face-to-face instructor led course. Of the 34 students, 14 students volunteered to participate in the study. One student agreed to participate but was unable to comply due to personal responsibilities. Another student completed the online survey but was unable to participate in the interview portion, however was present and agreed to participate in the observation portion.

All students in the study sample were between the ages of 20-29, however not all fit the traditional student model. One student had taken time off after high school before re-entering school. Two students had small children at home and one student attended classes with an emotional support animal. One student was attending classes for nursing but changed her major when she determined how much she enjoyed teaching peers in her nursing classes. All participants in the sample were female. All participants had participated in the program of study at the research site from the beginning although a few had taken time off between classes either for financial or personal reasons. All participants remarked upon the rigor of the program and shared collective learning experiences from on-site field studies and internship practicums thus reinforcing the high degree of cultural competence in their area of study (Romney et al., 1986).

As 3rd and 4th year pre-service teachers, the 12 participants chosen shared cultural competence based on collective learning experiences to sufficiently address the research objective to explore a collective perception, belief, or behavior within a homogeneous group. Informed consent was collected from all study participants prior to their participation in the initial interview segment. An observation opt-out agreement was provided to all students in the observation class, however all agreed to have their classroom experiences included in the study.

Research Methodology and Analysis

Qualitative research is conducted to investigate the everyday lives of different types of people and perspectives under different circumstances and in different situations (Yin, 2016). Creswell (2013) contends qualitative approaches are most fitting in contexts where a researcher seeks to explore individual stories and voices, to follow up on existing quantitative research, or is interested in developing theories of social engagement. According to Creswell (2013), a case study explores a real-life bounded system over time thorough extensive, comprehensive data collection involving diverse information assembly. A case study may be explanatory or exploratory and may be utilized in both qualitative and quantitative studies (Creswell, 2013).

Yin (2014) asserts case study research is used to understand phenomena associated with individual, group, organizational, social, and political fields from a holistic perspective over which the researcher has minimal or zero control. It is a comprehensive methodology encompassing the “logic of design, data collection techniques, and specific approaches to data analysis” (Yin, 2014, p. 17). As with other research designs, case study research must incorporate procedures to guard against threats to validity, preserve a chain of evidence, and investigate and test variant conclusions (Yin, 2014). The rationale for selecting a descriptive case study with embedded units afforded the opportunity to examine multiple units (pre-service

teachers) within a single institution of higher learning. In capturing pre-service teacher perceptions of instructor EI in everyday situations this study provides insights and understandings about EI theory in education and is aligned with Yin's (2014) rationale for single case design. This study utilized a descriptive case study research design with embedded units of analysis including both holistic data collection and an EI survey to provide a richer understanding of the research questions and explore a phenomenon within its natural settings (Yin, 2014).

According to Yin (2014), case studies should include multiple data sources to converge in a triangulating fashion for in-depth analysis of the phenomenon in context. Multiple sources of data were collected and analyzed through semi-structured interview, classroom observation, and an EI survey to add credibility and to check the consistency of the data gathered (Patton, 2002). Eisenhardt (1989) proposes a combination of both quantitative and qualitative data sources in a case study as corroborating quantitative evidence may strengthen qualitative evidence as well as reinforce underlying theories or relationships. Yin (2014) suggests the addition of quantitative components to qualitative research allows the researcher to investigate more complex research questions, collect more robust evidence, and analyze concurrent data on the phenomenon under study. Triangulation of data allows for converging lines of inquiry whereby a case study's findings are supported by more than a single source of evidence and strengthens the overall construct validity of a research study (Yin, 2014).

A case study protocol was developed to increase the reliability of the study while providing guidance throughout the data collection stage. Within the case study protocol were the data collection instruments along with an overview of the case study and an outline for the report (Yin, 2014). A mixed model of EI incorporating the ability or four-branch model of EI (Mayer

et al., 2016) with traits associated with emotional self-efficacy provided the framework for measurement instruments in this study. Trait and mixed EI models add noncognitive competencies to ability model cognitive structures imperative to successful coping and resilience in difficult situations (Cho, Drasgow, & Cao, 2015). The semi-structured interview questions were field tested and vetted by a group of eight colleagues prior to inclusion in the case study protocol. Permission to use the WLEIS for educational purposes was received from the survey developer (Appendix E) and an observation protocol was developed to organize real-world insights and emerging themes garnered from the observation experience (Creswell, 2013). A case study database was implemented to preserve all case study documentation including raw data from interviews, field notes, a researcher's diary and planning documents as well as additional resources obtained from the Internet and supporting colleagues.

Permission to conduct research at the college was received (Appendix F) along with Institutional Review Board approval (Appendix G). Field research began upon approval Institutional Review Board approval from Concordia University (Appendix H). Permission was received from cooperating professors to recruit students from their classes and to observe a class session during the current term. From the 19 students who were interested in participating in the study, 14 students returned informed consent documents and scheduled meeting dates to conduct interviews. Of the 14 participants, 12 completed all components for inclusion in this research study. Interviews were conducted in sessions most convenient for participants. Some sessions were completed at the college campus before or after scheduled classes, with other interviews conducted at a local coffee shop or digitally. Interview sessions were informal and ranged in time from 30 minutes to 45 minutes. Interviewer shared the email link to the WLEIS online survey at the conclusion of each interview. All participants completed the online survey.

Yin (2014) maintains pattern matching is one of the best methods for case study analysis. Pattern matching compares an empirically based pattern based on the findings from a case study with a predicted pattern generated before data collection (Yin, 2014). With pattern matching if the empirical and predicted patterns appear to be comparable, the results help to strengthen a study's internal validity. Empirical propositions may stem from literature, theory, or researcher experience (Yin, 2014). For this study each data source was collected and analyzed independent of each other (Yin, 2014). Interview data was analyzed initially inductively and coded ontologically through affective and structural methods (Saldana, 2016) following Yin's (2016) five-phased cycle for data analysis. Constant comparison was followed with each interview conducted, as well as searching for rival thinking and negative instances to ensure validity during analysis (Yin, 2016). Content analysis was used in analyzing observation data for patterns and relatedness of lived experiences (Yin, 2016). Descriptive statistics were used in the analysis of the survey data. Each method provided unique understandings of the phenomenon under study and was key in the pattern matching process.

In pattern matching, identification of an overarching proposition for the study is the first step. This is followed by testing the empirical pattern from each data source against the predicted pattern described in the research (Almutairi, Gardner, & McCarthy, 2014). If the predicted pattern matches the empirical pattern found in the research, the findings are said to support the proposition thus confirming the theory. An alternative explanation is required if the predicted pattern of findings does not match the empirical findings (Almutairi et al., 2014).

Research study propositions with data collection tools are presented below in Table 4. Relying on theoretical propositions shapes the data collection plan and helps to focus attention on specified data while disregarding data not pertinent to a study (Yin, 2014). Although the

interview portion of this study was the primary information-gathering tool for predicted pattern one, field notes and interviewee responses were integrated in interpretation and synthesis of the overall understanding of the investigated case.

Table 4
Case Study Propositions and Crosswalk

Proposition	Description	RQ	WLEIS	Tool
1	EI within institutions of higher learning plays a role in perceived student success, engagement, and life satisfaction.	RQ 1 RQ 3	OEA SEA ROE	Interview
2	EI within an institution of higher learning plays a role in academic achievement and student engagement.	RQ 1 RQ 3	OAE UOE	Observation
3	Self-perceived EI within pre-service teachers attending study at an institution of higher learning can influence success, achievement, and life satisfaction.	RQ 1 RQ 2	OEA SEA ROE UOE	Survey

Note. Research Questions (RQ), WLEIS (Wong Law Emotional Intelligence Survey components, OEA-Others Emotional Intelligence, SEA-Self Emotional Intelligence, UOE-Use of Emotions, ROE- Regulation of Emotions), interview question correlation to study components.

The overarching predicted proposition and theoretical framework for this study was based on a review of the literature and EI theory: Emotional intelligence (EI) within an institution of higher learning plays a role in student success, academic achievement and engagement, and overall life satisfaction as perceived and experienced by pre-service teachers. The interview component of this research study addressed the propositional pattern: EI within an institution of higher learning plays a role in perceived student success, engagement, and life

satisfaction. Interviews were offered to participants in a manner most conducive to their schedules either face-to-face, digitally, or by telephone. Face-to-face interviews were recorded and transcribed immediately in a three-column coding document. Digital interviews were added to the three-column coding document upon receipt. There were no telephone interviews included in this study. Coding of interview data followed Yin's (2016) five-phased cycle for analyzing qualitative data including: compiling, disassembling, reassembling, interpreting, and concluding. An inductive approach was initially used in concert with the study's research questions to group data into the four primary domains of EI including self-emotional appraisal, others' emotional appraisal, use of emotion, and regulation of emotion. Initial coding of interview data began with thorough reading of all interview documentation to look for repeated patterns, themes, and concepts. This type of open coding assists in breaking down data into discrete parts (Saldana, 2016) and corresponds with step-2 in Yin's (2016) five-phased cycle for analyzing qualitative research. To disassemble the data into smaller fragments multiple approaches to coding were employed including both affective and elemental methods (Saldana, 2016). Saldana (2016) submits emotion codes are appropriate for all studies but especially studies that "explore intrapersonal and interpersonal experiences and actions in matters of social relationships, reasoning, decision-making, judgment and risk-taking" (p. 125). Second cycle coding disassembled interview and data further by assigning value codes to participants' lived experiences and perspectives (Saldana, 2016), and resulted in a matrix of categories for individual pieces of evidence (Yin, 2014). Interview data and codes were then submitted to Atlas.ti (Version 8, Atlas, 2017) to verify and validate coded material. Broad themes revealed through both hand coding and CAQDAS coding focused on three areas: (a) appraisal and expression of emotion (empathy, service orientation, self-actualization, and self-awareness); (b) use and understanding

of emotion (adaptability, creative thinking, motivation, and flexibility); and (c) reflective regulation of emotion (stress management, control, interpersonal relationships).

Observation in a case study is a method to develop objective and accurate understandings of a phenomenon under study (Yin, 2014). It allows the researcher to check for non-verbal expression of feelings, emotions, and attitudes in a real-life setting. Observation in this study was designed to address the propositional pattern of: EI within an institution of higher learning plays a role in academic achievement and student engagement. The observation component of this research study was conducted during a class session where all study participants were present. Opt-out agreements were distributed to all students in the class, however all students in the class agreed to have their experiences recorded. The session observed was near the end of the winter term and observer remained for the duration of the class. Observation data was analyzed through content analysis with the purpose of categorizing verbal and behavioral data according to the overarching study proposition (Yin, 2014) and then further defining the data by recurrent themes and patterns. Primary themes identified within the observation data include a strong emphasis on peer and collegial support, student choice and relevance, critical understanding through collective experiences, and instructor empathy and passion for content.

An online WLEIS survey (Appendix A) was developed through Qualtrics Survey Software (2017) to measure the four domains of emotional intelligence including self-emotional appraisal, others' emotional appraisal, use of emotion, and regulation of emotion. Study participants completed the online survey following the interview portion of the study. According to Law, Wong, and Song (2004), EI has been positively associated with life satisfaction. As intrapersonal emotional recognition and management helps individuals deal with emotions, "a person with high EI should be able to recognize his or her emotions, to regulate those emotions

and to use them to facilitate performance” (Law et al, 2004, p. 485). As a result, this person should be happier and more satisfied with life. The WLEIS online survey was selected as the primary measurement tool for propositional pattern: Self-perceived EI within pre-service teachers attending study at an institution of higher learning can influence success, achievement, and life satisfaction.

Summary of the Findings

Data collection and analysis for this case study focused on an overarching proposition exploring pre-service teacher perception of instructor EI and its influence on student success, academic achievement, engagement, and life satisfaction. Interviews were coded and analyzed for patterns, repetitions, and themes according to the five-phased cycle outlined by Yin (2016). Broad themes revealed through both manual and CAQDAS coding focused on three areas: (a) self-awareness (empathy, service orientation, and self-actualization; (b) use of emotion (adaptability, creative thinking, motivation, and flexibility); and (c) reflective regulation of emotion (stress management, control, interpersonal relationships) specifically in relation to instructor affective attributes. Observation experiences were analyzed through content analysis both descriptively and interpretively. Primary themes identified within the observation data include a strong emphasis on peer and collegial support, student choice and real-world relevance, critical understanding through collective experiences, and instructor empathy and passion for content. The WLEIS was provided to study participants after interview sessions and was analyzed using SPSS for descriptive statistics.

In comparing the pattern of findings with the predicted pattern identified in the overarching proposition the interconnectedness of themes became evident. Recurring affective themes within the data figured prominently as related to: (a) emotional connection through

instructor support and empathy, (b) emotional awareness through facilitation and use of emotion, and (c) emotional engagement through instructional attributes. Each theme is discussed below along with the experienced and predicted patterns identified in the investigation's propositions.

Presentation of the Data and Results

The following section will provide an in-depth analysis of the themes identified from the research. The data will be presented in a structured format by each theme with the accompanying proposition. Discussion and evidence from the lived experiences of study participants will follow along with results and questions for further study. All pre-service teachers will be identified by a 'P-#' to guarantee confidentiality.

Theme: Emotional connection through instructor support and empathy

- The experienced pattern was: Instructor EI has an impact on pre-service teacher success, engagement, and life satisfaction.
- The predicted pattern was: EI within institutions of higher learning plays a role in perceived student success, engagement, and life satisfaction.

By the time pre-service teachers are in their next to or final year in college they have amassed a rich and intellectually stimulating toolbox of all things education. They have the content, they have the context due to field studies and internships, and they have a hearty collection of peers, professors, and supervising staff ready to provide support where needed. Teachers themselves have the desire and motivation to be the teacher they aspire to be, and they put forth amazing amounts of effort to achieve that goal. But what happens when that high level of support vanishes when they become masters of their own classes? What happens to that overwhelming desire to make a difference in the life of children through education?

When PSTs were asked if they have someone who supports them in their education, all identified at least one person who provided substantial emotional support. Family members and spouses were naturally identified, but the category with the largest impact was professors, academic advisors, and cooperating teachers. Not just for academic issues, but in all instances. Said one PST about a specific professor: “She pushes me to do my best and I know I can go to her for anything” (P-3). Advisors remained another category of great appreciation. “He has been wonderful in helping me and supporting me through all my courses. He has even made himself available to listen to my concerns and talked me down from wanting to drop out of school due to financial struggles. I could not have made it this far without all of them” (P-8).

Feeling overwhelmed due to a lack of control emanated through many interview threads. Their professors seem to know just when “enough is enough.” One participant shared she had “recently pulled two all-nighters in a row and still didn’t get the assignment done. I got to class early and when the professor asked how I was today, I broke down because I was so exhausted” (P-7). This professor allowed the student an extra weekend to complete the assignment and requested to be informed if this student felt overwhelmed again. This participant had an interesting reflection based upon this experience:

Because he had gone out of his way to help me, I felt stronger. I actually didn’t want to take the extra time because I knew how that affected his grading for the semester, so I worked yes, another all-nighter, to get the assignment done before the weekend was over. I felt really happy that he listened to me and cared about how I was feeling. (P-7)

Sometimes support comes in being understood. Sometimes in showing one cares. Both were used in examples of emotional qualities important to teaching. Compassion, empathy, and

promoting an atmosphere of comfort were characteristics identified by 10 participants as vital for teachers. One participant who shared personal experience about difficulty fitting in explained:

I really think being able to understand others, especially those who think differently and process situations differently than you, is extremely important. Despite its academic roots, teaching is a very social and psychological profession where we must deal with and approach situations we may be uncomfortable with, but our duty as educators is doing everything we can to help our students have quality lives and quality educations. (P-1)

The sense of duty was frequently featured in the interviews. Duty to family, duty to excel, and especially duty to students in meeting their needs and supporting their academic achievement. A participant had become frustrated with a student in her internship school who was refusing to work no matter how much help she provided:

She just sat there and stared at me. Every time I asked her to work she would give me a smart comment about how ‘she don’t have to do what I say because I’m not a real teacher’. This student is already failing...I desperately want to help her pass and graduate. (P-11)

Building relationships is key to student engagement. “Nobody cares what you know unless they know how much you care,” originally attributed to Theodore Roosevelt has been modified and used profusely in education. However, it stands as fact in the experiences of teachers everywhere. A participant shared she had great appreciation for one of her professors because this professor gets: “extremely protective over the kiddos we work with” (P-8). She stated: “I really respect this teacher because the protection indicates she cares deeply about what we do with students” (P-8). Another participant shared an experience that exemplifies the

opposite end of the spectrum when she spoke with a professor about missing some classes due to a family emergency:

I informed him my husband had an incident with his heart and I would have to miss a few classes. When I later returned to class the professor was very upset and short with the entire class. I found out later he was upset that I was able to come back after missing classes. (P-11)

This participant remembers not giving much effort to this class and: “just wanting it over” (P-11). Another participant became visibly upset remarking on a similar situation: “The instructor came in exuding frustration from every pore. During class he was very short with answers and kind of rude which led both myself and fellow students to not want to participate” (P-6). The same participant listed: “...consistent no matter what is going on in your personal life,” (P-6) as an important characteristic for teachers.

These experiences, both positive and negative, are key in the overwhelming response choice for the importance of teacher empathy in maintaining a safe and inviting classroom environment. “I think it’s important to be empathetic with students. We each come from different backgrounds and the ability to understand them [students] can only help instruction” (P-9). Similarly: “Students need someone who will understand exactly what they bring to the table and help them to improve knowledge” (P-6). Empathy is important in recognizing emotion in colleagues as well. A participant explained how she was able to recognize and offer support to her supervising teacher who had just found out during lunch that her mother-in-law had been diagnosed with cancer: “I could feel her unease as soon as she walked into the room. There was this overall feeling that came over me. Then when I looked at her face, I could see she was upset” (P-11). Although this PST shared she offered to take over the class for the supervising

teacher if she needed time alone, the teacher politely declined and went on teaching for the remainder of the day. “I knew exactly how she felt at that moment in time as I lost my mother to cancer and I know how lost you feel” (P-11). In this study PST personal experiences have been found to drive empathetic reactions, this researcher must wonder if empathy would be easily recognized in those with little to no experience with the situation.

Theme: Emotional awareness through facilitation and use of emotions

- The experienced pattern was: Pre-service teacher self-reported EI has an impact on student success, achievement, and life satisfaction.
- The predicted pattern was: Self-perceived EI within pre-service teachers attending study at an institution of higher learning can influence success, achievement, and life satisfaction.

Pre-service teacher perception of EI in self and in others was measured through an online survey. EI theory is predicated on two constructs including the ability model and the trait or mixed model. Ability EI is measured through tests of maximal performance and are generally correlated with cognitive-emotional measures (Cho, et al., 2015). This study utilized an ability-based measure, the Wong and Law Emotional Intelligence Scale (WLEIS), to acquire pre-service teacher perceptions of EI in each of the four domains measured, including self-emotional appraisal, others’ emotional appraisal, use of emotions, and regulation of emotions. Table 5 provides a description of each domain with identifiers for consideration.

Table 5

Domains of the Wong Law Emotional Intelligence Scale

Domains	Descriptors
Self emotional appraisal (SEA)	Ability to understand and assess deep emotions and express emotions accurately
Others' emotional appraisal (OEA)	Ability to perceive and understand emotions of others
Regulation of emotion (ROE)	Ability to regulate emotions by moderating negative emotions and enhancing positive ones / adaptive coping
Use of emotion (UOE)	Ability to use emotions to facilitate inductive reasoning and creativity/ Encourage personal performance

Note. The WLEIS by domain. Adapted from “Examining the psychometric properties of the Wong and Law emotional intelligence scale,” by S.W. Sulaiman and M.Z. Noor (2015), *Journal of Social Sciences and Humanities*, p. 81–90.

The WLEIS is a self-report instrument of 16 items rated on a 7-point Likert scale (Cho, et al., 2015). Sulaiman and Noor (2015) determined the WLEIS valid based on validation analysis of construct and criterion validity. Reliability was satisfactory with Cronbach’s alpha coefficient ranging from 0.83 to 0.92 in all domains of the scale. The Cronbach’s alpha coefficient for the current study was .799.

Instructions for completing the online WLEIS were provided to study participants at the conclusion of the interview segment of the study. Descriptive statistics through SPSS were used to analyze survey data and are presented in Table 6. Survey data was analyzed on individual domains as well as the total survey with all domains included. This form of analysis was chosen

to determine if any one (or more) EI domain proved to be more significant for this research study. The results begin with the total survey scale analysis with the breakdown of individual domains to follow.

Table 6

Descriptive Statistics for the Wong Law Emotional Intelligence Survey (N=12)

	<i>Minimum</i>	<i>Maximum</i>	<i>Mdn</i>	<i>Mean</i>	<i>SEM</i>	<i>SD</i>
WLEIS	75	101	97.50	93.75	2.375	8.228

Note. Descriptive statistics for all components: self EI, others' EI, use of emotions, and regulation of emotions. *Mdn*=median; *SEM*=standard error of the mean; *SD*=standard deviation.

The median score of participants' self-ratings on all four domains of EI was 97.50. Total scores ranged from 75 to 101 out of the possible ratings of 16 to 112, although the data were skewed with more than half the participants' scores (84%) between 88.00 and 100.00. Bulmer (in Adams & Lawrence, 2015) proposes a highly skewed distribution is indicated by a skewness statistic greater than +1 or -1, however some researchers use a less stringent parameter and allow for +/- 2 to indicate an extreme skew. The level of skew may also be determined through the standard error of the skew statistic. If a skewness statistic (G_1) is greater than twice the standard error of a skew (SES) it is considered extreme (Adams & Lawrence, 2015). For this sample the skewness statistic is -1.236 with a standard error .637. Although this falls within the bounds of a normal distribution ($1.236 < 1.274$) this study used Bulmer's (1979) rule of thumb for determining skewness and report what is deemed more reflective of the sample distribution. Skewness statistics for the WLEIS are found in Table 7.

Table 7

Scale Statistics

Scale	<i>LL</i>	<i>UL</i>	<i>M</i>	Skewness		Kurtosis
				Statistic	<i>SE</i>	
WLEIS	75	101	93.67	-1.236	.637	.864

Note. *Mdn*=median; *SEM*=standard error of the mean; *SD*=standard deviation.

Table 8 details perceived EI by domain. Participants in the study generally felt they had a good understanding of the emotions of people around them and were good observers of the emotions of others (WLEIS: Component 1). In addition, goal setting and self-motivation were noted as areas of strength (WLEIS: Component 4). Areas of perceived weaknesses included being able to calm down quickly and having good control of their own emotions (WLEIS: Component 2), and having firm understanding of their own emotions (WLEIS: Component 3). There was some variance in self-perceived EI most notably in regulation of emotion and self-emotional appraisal. In consideration of data by domain: (a) self emotional appraisal (SEA) *Mdn*=24.50, (b) others' emotional appraisal (OEA) *Mdn*=25.00, (c) use of emotions (UOE) *Mdn*=25.00, and (d) regulation of emotions (REG) *Mdn*=21.50), higher scores were noted in domains of UOE and OEA with higher scores indicating greater perceived EI in those domains. According to Mayer et al. (2016), both domains fall into the middle level within the hierarchy of EI branches with self-perception and expression of emotion at the lower branch and regulation of emotion the highest.

Table 8

Descriptive Statistics by Domain

WLEIS Component	<i>N</i>	<i>LL</i>	<i>UL</i>	<i>M</i>	<i>Mdn</i>	<i>SD</i>	Skewness		Kurtosis
							Statistic	<i>SE</i>	
Others' Emotional Appraisal	12	17	28	24.42	25.00	3.118	-1.287	.637	1.880
Regulation of Emotion	12	15	25	21.25	21.50	2.800	-.904	.637	1.002
Self Emotional Appraisal	12	15	27	23.33	24.50	3.447	-1.458	.637	2.192
Use of Emotions	12	20	27	24.67	25.00	2.015	-1.052	.637	1.308

Note. WLEIS by domain. *LL*= lower level, *UL*=upper level, *M*=mean, *Mdn*= median, *SD*=standard deviation.

In analyzing individual responses within each domain, goal setting and achievement in UOE was an area of strength (*Mdn* = 7.00), as was motivation and encouraging one's personal best (*Mdn* = 7.00). This supports interview data whereby all participants noted personal motivation to become a teacher and continued success in the program as highly important to their wellbeing. PSTs also felt they were highly sensitive to the feelings and emotions of others (*Mdn*= 6.50) and they generally have a good understanding of the emotions of people around them (*Mdn*=6.00). One of the findings from the interviews was an overall perception in the importance of "socially acceptable emotions." Participants generally felt it was acceptable to

display emotions that would not be construed as “silly,” “overly dramatic,” or could be perceived negatively as a woman and make people not take one seriously. When the question about whether participants considered themselves good observers of others’ emotions was asked during interviews, 11 out of 12 participants immediately identified negative emotions as being recognized rather than positive occurrences. Other participants shared examples of efforts to make everyone comfortable and being in tuned to an internal monologue of analyzing others’ emotions. Participant reactions were based on what was considered acceptable from internal dialogues and body language and/or facial expressions. Emotions such as frustration, weariness, joy, anger, sorrow, and as one participant said: “big emotions” (P-7), were readily recognized by most participants. Acting on them was not as supported. One participant shared noticing emotions in others tended to make her uncomfortable. When queried why she felt that way, she shared past experiences had made her wary of becoming involved. Prior rebuffs from colleagues, family members, and instructors caused her to temper her responses accordingly. In scenarios with instructors, similarities were noted. Negative experiences were identified in every participant who remembered a class period when they were very much aware of what an instructor was feeling when they walked into class. Negative experiences caused participants to remove themselves emotionally and physically from the situation through tuning the instructor out, missing classes, exhibiting minimal effort, in one case with a participant who stated she felt bullied by an instructor, dropping the course entirely. Participants identified this through instructor shortness of responses, rude or frazzled behavior, or limited interactions with students.

Regulation of emotions (ROE) was identified by data as the domain pre-service teachers felt the least comfortable with. Median scores across all four questions were below all domains (*Mdn*=21.50), with responses to questions pertaining to having good control over emotions and

being able to calm down quickly when angry the lowest. As regulation of emotion and the conscious and reflective response to emotion resides at the top branch of the ability model of EI (Mayer et al., 2016), the results support research indicating EI develops with age and/or experiences (Mayer et al., 2001). Regulation of emotion was discussed during participant interview in response to stress management. All participants shared they experienced stress from minimal to overwhelming levels. Many responses in the extreme were in relation to class and internship responsibilities, however all participants remarked they had tools to help them adjust to stress from taking deep breaths, meditation, journaling, and exercise. For some having knowledge of stress reduction strategies were not effective when needed as one participant shared: “I understand how to manage my stress, but it sometimes gets out of my control which makes it unbearable. I try not to stress but sometimes nothing works except to distract my mind temporarily” (P-10). Participants who shared having a support system or person seemed to perceive their stress management skills as effective. One participant who experienced panic attacks learned to: “force myself to cope and manage stress through building a system of self-reassurance, breathing exercises, and time management” (P-1). Another visualizes a calmer mood or thinks about how her grandfather would be disappointed in her behavior if she were to become upset or out of control. Still others rely on self-talk and counselors to assist with stress management. An interesting facet emerged from the interview data. When it comes to stressful situations or stress management, participants did not mention peers as being part of their support system. When queried as to why this may be so, one participant shared: “Well, all my peers are going through the same stresses and struggles as I am. I don’t want to burden them on my account” (P-5). Another participant identified with this respondent when she recognized a peer who was extremely disappointed with herself over an assignment:

She had her head down, her eyes were red, and even though we sit next to each other she didn't make eye contact the entire class. I gave my peer her space until class was over and then checked in with her. (P-10)

Checking in, space, and hugs were readily identified as welcomed peer interactions when students were feeling stressed. "Sometimes you really don't want somebody all into your problems, it is enough to know they are thinking about you and care" (P-12). Eleven out of 12 participants stated their number one priority when attending classes and working with children was to be considerate and think from the point of view of others. "I know I sometimes just want to be left alone when things aren't going so well, that's why I give space. I know exactly how they feel" (P-2).

Theme: Emotional engagement through instructional attributes

- The experienced pattern was: EI in instruction has an impact in student academic achievement and student engagement.
- The predicted pattern was: EI within an institution of higher learning plays a role in academic achievement and student engagement.

In identifying instructional attributes that encourage student engagement, instructor and student passion for content factored in 10 out of 12 interviews. For PST it was passion for the teaching profession. A desire to make a difference in the life of a child, having an impact on future citizens of society, making the world better through education, or having family members in the profession contributed to that passion. With passion comes enthusiasm for the profession and goals centered on continuing their education and having a class of their very own.

Professors were also identified in their passion for students, passion for content, and passion for increasing the rigor and instructional knowledge needed for PSTs to enter the

teaching profession. Specific actions identified by students to be especially engaging in instruction included using humor in instruction, energy and movement when teaching, collaborative practices, and instilling real-world experiences into learning. Humor was noted by multiple participants as being a tension dissolver as helping students to refocus on school after leaving a sometimes-harried home life. One participant shared: “I love to laugh. I am comfortable laughing and being silly. When others, especially people in roles of authority like teachers, make jokes and laugh during lessons, I find it much more comfortable and engaging” (P-12). Another participant spoke of how her teacher showed up to class dressed in pajamas and read a story to everyone: “He always has something new and fun for us. Even though I am usually stressed coming to class at the end of the day, I love coming to this class!” (P-12). Spontaneity and flexibility were noted as tools to enhance student understanding of content as well as encouraging student engagement:

We had a lesson on CHAMPS which is a program that uses behavior expectations and we all had lots of questions because it was new. The teacher looked around and saw hands kept going up, and we were all talking about the topic, so she gave us the option to continue with the discussion or go on with our schedule for the day. (P-11)

Another participant detailed her experience:

In this one class, numerous times we would be doing a hands-on project or presentations and the instructor would say something like, ‘Well, I planned on stopping to cover...something...but I think we’ll keep doing this until the end of class.’ This kind of flexibility lent itself to instruction that was more engaging and ultimately more beneficial. (P-12)

Inquiring why she thought it was more beneficial she replied: “Well, usually when we do hands-on activities those are the things we will be working on with our internship classes. So, it’s like I’m learning two ways—one way from my professor and another way from my supervising teacher” (P-12). Activities that encouraged student creativity were heralded by all PSTs as lessons that they were especially enthusiastic about: “I really enjoyed a story play activity. We were able to dress up and rewrite the story” (P-2). Or: “One of my favorite things is to figure out different learning centers and share them with the class. I think this allows for creative thinking, but you also get to see other peers’ ideas you can use in the classroom” (P-4). Control and choice over class agendas and assignments was a recurring theme: “I was excited to research a controversial topic in class. The instructor did not give many instructions and what was there was limited to a handout. I think it was the activity itself that made everything interesting and exciting” (P-10). Students also were enthusiastic about interactive teaching methods and experiences that relate to authentic classroom instruction: “I love being organized and creating procedures that I will be able to use in my class, when I have my own class, that is!” (P-4).

Enthusiasm for the content or subject also contributed to student engagement. Students who had a favorite topic or content area listed them as being especially engaging. Instructor passion for content was identified as sparking enthusiasm in students as well. One student shared a particularly reflective response:

Anytime a topic is about discrimination in any form affecting the education of a student (or students) comes up, the educators are rightfully emotional and passionate about this subject. To bring a sense of reality to what discrimination in education looks and feels like, many professors have to utilize forms of teaching that evoke emotional responses

out of us so we can understand the severity of it in certain areas through the emotional sense, and then be engaged enough to learn the logical side of it. (P-1)

Teaching strategies and pedagogies that evoke emotional responses may include a particularly emotional video, sharing personal experiences about the topic, and real-life situations currently slated as hot topics in education or the legislature. One participant shared similar experiences with her English for Speakers of Other Languages professor: “This instructor conveyed her passion for working with and educating English Language Learners students in her speech, body language, and her teaching. This helped her teach concepts that made us care more about English Language Learners” (P-6). Another participant commented as to why instructor passion matters in education:

As an education major, I had all former K-12 educators as my instructors, and these are an emotional bunch. They often used examples and anecdotes from their ‘kids’ to garner an emotional response. Being emotionally charged and aware leads to showing passion for one’s work and being sensitive to the needs of the students. (P-12)

Or as another participant stated so simply: “If the instructor is enthusiastic it is definitely contagious. I have never felt such passion from such intelligent and capable instructors before” (P-8).

These factors were confirmed during the researcher observation of a class session. Support was evident by the seating of students in ‘little cities.’ Each student grouping came with similar body language and resource materials. Two groups presented backpacks on the tables with technology engaged. The remaining three groups had backpacks on the floor with each table set up with snacks, colorful markers, and cell phones visible but not frequently referred to. One group had a support animal present who barked once during the entire class but no

disruption in students nor instructor was evident. The room itself presented an exemplar of an elementary classroom. Student work was displayed on the walls, both PST work as well as student work from field experiences and internships. One display was entitled: All About Me, and included collages of PST families, hobbies, pets, etc. Instructional resources and charts were also displayed denoting content and resources currently used in district schools.

The instructor opened the lesson with an announcement of the resources available to students in dealing with the end-of term stresses. Resources available to students in the student union building included emotional support animals, snacks, and counselors to speak with if needed. The daily agenda was reviewed with the class and the instructor moved to a discussion of the culminating activity for the term. The importance of the assignment was noted as well as success criteria for grading. The instructor remarked on the amount of work contained within the student projects and requested patience with getting grades back to students. She confirmed the importance of the assignment and value of student work with: “I read every single word you submit to me and sometimes I may request additional information from you because I care about your grades” (Instructor). Although participants spoke in the interviews of the overwhelming amount of work due from them this term, there were no visible signs of student stress or anxiety during this class period.

The topic for the lesson was response to intervention for struggling students. The instructor prefaced the lesson with an oral review and shared the relevance of the topic. Following a video, class discussion ensued about data walls with instructor and students sharing real-life experiences from classrooms. One student shared her heartbreak of a practice at her field experience school:

...all the students' desks are wrapped like Christmas presents. Students would decorate their desks with bows and the like when they get good grades. It makes me sad because some student desks are all wrapped up while others have nothing. (P-4)

The instructor exhibited passion for addressing needs of all students in increased voice tone and active body language as she queried students as to how they would address the needs of gifted students. The discussion turned to social issues in schools especially those in poverty or the affluent disadvantaged. During the session the instructor encouraged conversation within groups and then share-out to the class. She then used humor to break tension in the room brought about by an intense discussion of economically disadvantaged children: "So, what do we do with them? Get them to be a buddy? No! But we have a wall!" (Instructor in reference to data wall). All students in the class laughed and the class transitioned to the next activity. It was easily identified by the researcher that the instructor had great passion for students in poverty. The instructor provided examples from past experiences as a teacher and school administrator that elicited much discussion from the class. When speaking of faulty practice of conducting tutoring in school cafeterias, the instructor simulated the noise of pots and pans clanging together, cleaning tables, intercom announcements, then stated, "Remember Maslow before Bloom. Take care of lower needs first" (Instructor).

The instructor used humor and emotions frequently during instruction to activate learning. One example was Alligator Brain:

Are you in your alligator brain? Your fight or flight mode? Ever been in the back of your brain? You are not thinking in your cerebral cortex. I can look at each one of you whenever you walk in and know exactly how you feel. That's why I always bring candy to get the blood sugar up. Hey, I have canceled meetings because of that! (Instructor)

Students in class laughed and were fully engaged in the lesson. Toward the end of the class one student shared a particularly grueling personal experience that happened to her during childhood. The student became teary-eyed and all her classmates chorally responded their sorrow for her experience. The instructor was visibly emotionally moved by the vignette as well and responded in a quiet, caring tone directly to the student: “I am so sorry that happened to you (student name). You were hurting” (Instructor). The instructor tied the original content discussion back to discussed student experiences with: “Yes, analyze the data, but remember to analyze the child first” (Instructor). The clock ticked past the end of the class period, but all students remained in their seats and the discussion continued.

Chapter 4 Summary

This chapter explored the connection between instructor EI and self-perceived EI from the lived experience of 3rd and 4th year pre-service teachers. This descriptive case study provided an in-depth inquiry into pre-service teachers engaging in common study and their real-world experience with EI competencies, specifically self-and social awareness, use of and regulation of emotions, and how EI may hold promise in emotional management of pre-service teachers. Descriptive case study was indicated to explore a phenomenon from a holistic perspective over which the researcher has minimal or zero control and included multiple data sources to converge in a triangulating fashion for in-depth analysis (Yin, 2014). A case study protocol was implemented, and case study database was kept recording all aspects of the case study documentation. Data collection included interview, observation, and an online survey. Interview data was coded inductively by way of structural and affective methods of coding, and constant comparison between participant interviews. Atlas.ti was used following hand coding to verify thematic findings and to delve into deeper meaning. Content analysis was used to analyze

and interpret verbal and behavioral data, and descriptive statistics were performed on the survey utilizing SPSS. Themes identified through data analysis include: emotional connection through instructor support and empathy, emotional awareness through use and facilitation of emotions, and emotional engagement through instructional attributes. Pattern matching was employed to compare an empirically based pattern identified in the research study findings with a predicted pattern determined from the research. Chapter 5 explores the relationships between these themes and explores potential understandings, implications, and limitations of the research.

Chapter 5: Discussion and Conclusion

Introduction

Qualitative research is conducted to investigate the everyday lives of different types of people and perspectives under different circumstances and in different situations (Yin, 2016). The purpose of this qualitative case study was to explore how pre-service teachers perceive instructor EI in a state college teacher education environment. According to Ingersoll, Merrill, and May (2014), new teacher attrition is highest just after the first year of teaching, although certain elements were found to decrease the likelihood of teachers leaving the profession. In a study by Arghode (2013), EI and social intelligence competency with perceived social support helped students feel connected to instructors and encouraged student achievement and engagement. Formal feedback on teaching practices from instructors and mentor teachers the first year may provide a measure of social support critical for beginning teachers who may question their craft in the face of daily stressors relative to teaching.

An operational construct sampling of 12 pre-service teachers participated in this study to gain an in-depth understanding of pre-service teacher perception of instructor EI (Patton, 2002). All participants in the sample shared cultural competence based on collective learning experiences encountered throughout the program, and as the research objective was to explore a collective perception, belief, or behavior within a homogeneous group, a purposive sampling of 12 participants was appropriate for this study. This chapter summarizes and discusses the results of the study along with study limitations and implications of the findings for practice. Recommendations for further research and final thoughts conclude this research study.

Summary of the Results

This qualitative case study investigated the real-time experiences of 12 pre-service teachers in a state college teacher preparation program specifically in exploring instructor EI and EI awareness of self and others. Instrumentation and data collection included: semi-structured interview, observation in naturalistic conditions, and an online EI survey. The researcher followed Yin's (2016) five-phased data analysis process for analyzing interview and observation data including: (a) compiling, (b) disassembling, (c) reassembling, (d) interpreting, and (e) concluding. Data was coded and analyzed with a focus on emerging patterns, themes, and categories both by array and using Atlas.ti. Descriptive statistics (SPSS) were used to analyze the online WLEIS results.

Themes identified in the data were: emotional connection through instructor support and empathy, emotional awareness through use of and facilitation of emotions, and emotional engagement through instructional attributes. Pattern matching was used to compare an empirically based pattern found in the findings from the case study with a predicted pattern found from the literature (Yin, 2014). The overarching predicted proposition and theoretical framework for this study was based on a review of the literature and EI theory: Emotional intelligence (EI) within an institution of higher learning plays a role in student success, academic achievement and engagement, and overall life satisfaction as perceived and experienced by pre-service teachers.

Discussion of the Results

The purpose of this research study was to explore pre-service teacher (PST) perception of instructor EI and to investigate PST understanding of EI in self and others. The following research questions guided the development and implementation of this research study:

- RQ 1: How do PSTs perceive the nature of instructor EI in a state college teacher education program?
- RQ 2: How do PSTs perceive EI in self and others?
- RQ 3: What instructional (cognitive) and/or relational (affective) attributes are most associated with instructor EI?

Results and findings are discussed in this chapter with interpretation according to relatedness of common themes and theoretical implications disclosed in the data.

RQ 1: How do PSTs perceive the nature of instructor EI in a state college teacher education program?

Emotional connection through instructor support and empathy. Pre-service teachers view instructor EI through a lens of emotional connection and empathy. The desire to be heard and understood weaved its way through multiple interviews and informal conversations with study participants. Whether support for a personal reason or educational concern, the need to have someone listen and respond in a caring way was instrumental in motivating PSTs to move forward with a designated outcome. A word frequently used during interviews to describe the classroom environment was ‘comfortable.’ Participants felt the classroom was a safe place to share discussions, hopes, and fears without consequence or judgment. A mishap during a field experience was considered a learning experience and not an opportunity for criticism or shame. Students who did not feel comfortable and supported by instructors shut down, disengaged, and exhibited negative emotions toward classwork and overall satisfaction with the program. Trust was another word used to describe perceived instructor EI. Because of the relationship instructors had cultivated with participants, participants felt safe in communicating academic struggles and challenges as well as triumphs, and in doing so received just praise or support

toward academic performance. Trust also affords freedom and the will to innovate and the safety to be creative or to make a mistake. Among participants most favored activities were developing their own personal teaching materials or conducting independent research and presenting it to the class. Yielding control to students during instruction allowed for sustained critical thinking, student creativity, and richer innovation, while exhibiting trust in students' craft (Turculet, 2015). Allowing student voice requires relinquishing control over prescribed structures, however in doing so teachers provide opportunities for students to reason well and the disposition to do so.

Instructor EI was identified with promoting the value and richness of all student contributions and delivering meaningful content. Diversity was encouraged, and equity assured in field study placements, grading criteria, and evaluation practices. Study participants remarked on the feeling of belonging to something far greater than a college degree. They were present to positively change the future for the next generation of students. Participants radiated pride in their chosen profession with a strong desire to acquire new knowledge and experiences. In this study, constructive and timely feedback was an essential element for success in student learning cycles. Students appreciated the care and detail instructors afforded in planning lessons relevant to learning and directly related to future professional responsibilities. If students felt an assignment was not relevant to their learning or was not important from instructor voice and/or actions, they were not intrinsically motivated to do their best. Within the institution and individual classrooms neurodiversity was encouraged through resources and programing designed to address student strengths with workarounds for challenges as evidenced through finals week supports including: available counselors and therapy pets, refreshments, and increased availability of instructors and tutors.

Exhibiting care and compassion matters in all grade levels from elementary to post-secondary. It was vigorously reported on during interviews when instructors displayed mannerisms averse to emotional empathy. Passion and enthusiasm for the profession, content, and curriculum was a recurring theme in both students and instruction. Personal passion for making a difference in a child's life was presented as the primary reason participants entered the profession. When instructors shared their passion and enthusiasm during lessons, students were likely to be more engaged and enthused as well. Conversely, students were very much aware when instructors did not share similar passions. Statements from instructors indicating a lack of content knowledge, unwillingness to adapt to changes in schedules or environment, or an overall lack of perceived desire to be present in the classroom, represented a breach of trust that resulted in student discouragement and a lack of motivation to perform.

RQ 2: How do PSTs perceive EI in self and others?

Emotional awareness through facilitation and use of emotions. The PSTs participating in this study embodied several emotional competencies important to teaching including understanding of their own emotions, the ability to discern and understand others' emotions, and the capacity for empathetic involvement (Madalinska-Michalak, 2015). Even at this early stage of their teaching career, a strong sense of student advocacy was revealed from experiences working with children in field studies and internships and remained a primary motivator for maintaining success in the program. A finding noted within all responses was how participant empathy was based upon them having experienced similar situations and them truly possessing fundamental knowledge of what the other person was feeling. All study participants reiterated how their understanding and compassion for children expanded through the personal stories shared by instructors of their experiences teaching. In sharing these experiences through

story, instructors provided students with the backdrop of identifying shared human values across distinct interpersonal contexts and cultures. The English Language Learner, the economically disadvantaged child, the gifted and the educationally disabled child, all came alive to participants through instructor story eliciting students to feel connected to each person(s) within the story. In this manner, through artful class discussions connecting to student personal experiences students were able to reflect on diverse viewpoints in a safe, judgment-free environment and learn empathetic understanding from others' experiences.

Change was an accepted fact of life for all the PSTs in this study. However, if the change was excessive or unexpected all participants admitted they did not always feel equipped to overcome it. Having a measure of control over the change event seemed to mediate their level of compensating. Adaptive coping with aversive emotions and distressing circumstances was a general area of concern for most participants. In seeking support for stressors or challenges, the majority would seek help from family members or instructors rather than peers. For PSTs the reticence in asking peers for support was grounded on the presumption peers were probably confronting similar struggles, and from a professional standpoint, they did not wish to be perceived personally as lacking in skills. This may be a factor in early career teacher feelings of isolation and lack of support, which can eventually lead to burnout. Setting up non-evaluative systems of support for early career teachers within institutions of higher learning or within school districts, may benefit new teachers who are concerned their struggles may be perceived by schools as a lack of ability on their part. Also understanding occasions prone to cause stress in new teachers such as parent conferences, evaluations, and student behavior concerns, and providing support in the line of proactive planning may alleviate or ameliorate feelings of not being in control of situations.

All study participants had goals directly associated to completing school and teaching a class of their own. All perceived teaching as a higher calling, a passion, a desire to make a difference in the world, and leaving a legacy. Pre-service teacher self-confidence and enthusiasm for the practice of teaching seems high during this phase of their education as self-actualization is within their immediate future. The emotion of joy was openly expressed during interviews in connection to graduation and future employment. However, in speaking of displaying emotions in the classroom, most participants felt it was acceptable to share only socially appropriate emotions. Socially appropriate emotions including mild joy, enthusiasm, and limited sadness were deemed acceptable to share in a professional or collegial setting, however emotions considered extreme, such as fear, anger, or anxiety, were best kept for immediate family. Although participants were aware the practice of suppressing emotions was not healthy emotionally, many felt disclosing immoderate emotions to anyone other than kindred was unacceptable. Not wishing to worry or distress others by a show of emotions was of great concern to participants. Many shared they had been ridiculed in the past for a show of emotions, one even to the point of being bullied, or feared not being taken serious in the profession, so personal experiences imparted caution with emotions was necessary. Regarding sharing emotions with others, another choice was to “fake it until you make it” (P#12) by deflecting attention from one’s emotional state. As all participants in this study were female, it is unknown if this perception may generalize to other populations.

Understanding others and meeting others’ needs for comfort and support were noted as strengths across all measures. Through others’ body language, facial expressions, and mannerisms indicating anger, frustration, or distress a need for support was easily recognized, however it was not always acted upon. Again because of a wariness of violating socially

appropriate norms. Peer stress and distress was observed by participants in this study but was not acted upon in most cases. The fear of rebuff was most noted as the reason why support was not offered. Another reason was the dread of transgressing another's level of professional hierarchy. Pre-service teachers answer to supervising teachers and new teachers answer to veteran teachers. Assuming supervising teachers provide evaluative input on pre-service teacher performance, breaching the boundary from student-learner to peer-colleague is generally not recommended. Similarly, with peers, participants did not want to cross a line in offering help to classmates, however all agreed they would eagerly provide assistance if peers requested help. Research has shown both positive and negative emotions affect classroom climate, culture, and performance (Abe, 2011; Arguedas et al., 2016; Billings et al., 2014; Kahu et al., 2015; Qualter et al., 2011). In cases where instructors exhibited negative emotions during class, participant attitudes immediately turned to negative as well. This type of stress-contagion has been confirmed in the research and is aligned with student achievement as well. (Oberle & Schonert-Reichl, 2016).

Although PSTs were aware of the emotions of others most did not feel they understood what they were feeling all the time. They may have been conscious of feeling a general unease, but most were unsure of the reason. Emotions such as feeling stressed, overwhelmed, upset, annoyed, exhausted, frustrated, anxious, and nervous were identified and are similar to typical classroom emotions teachers may encounter. Stressed from not having enough time for lesson planning, overwhelmed by the responsibilities, upset or annoyed over administrative tasks, exhausted from curricular demands, and anxious or nervous over perceived performance during evaluations. Reflective regulation of emotions entails the ability to remain open to both agreeable and disagreeable feelings (Mayer et al., 2001) and to manage emotions in self and

others by controlling negative emotions while enhancing positive emotions (Mayer et al., 2016). Capacity to reflect upon and monitor emotions resides at the upper level of the ability model's hierarchy of emotions, and as such are skills that may be acquired with age and experience (Mayer et al., 2016). Practices and learning opportunities that build capacity in skills to regulate and monitor emotions may mediate challenges inherent in the teaching profession especially for early career teachers.

RQ 3: What instructional (cognitive) and/or relational (affective) attributes are most associated with instructor EI?

Emotional engagement through instructional attributes. When PSTs are doing what they love, involved in content related to their chosen profession they are engaged. More than one study participant shared they had a desire to learn as much as they could before they graduated. There is an innate love of learning present when one is participating in actions related to their passion. When students felt supported by instructors they were more willing to listen and take particular care with assignments. Study participants especially identified with instructors who conveyed their personal passion for working with and educating children through examples, stories, digital resources and photographs. Instructional attributes identified as most associated with instructor EI included:

- Creative and interactive teaching methods
- Flexible implementation of instructional content
- Interleaving personal experience or convictions within topics
- Use of humor in instruction
- Energetic enthusiastic delivery of course content

Participants preferred instructors who treated them as equals and respected their differences. The use of real world content was preferred, as was introducing a topic using realia or student work samples. Student ability to move about the classroom was not indicated as an instructional attribute fostering engagement, however when the movement involved student participation in hands-on activities, engagement was likely. For some, engagement was predicated on student choice. When students had a choice in how to present an assignment, what to present, and when, they were more apt to be creative and to incorporate what they perceived as their strengths within the assignment. Activities that diminished engagement included: frequent lecture, excessive workload, lack of relevance in assignments, and grade anxiety.

Discussion of the Results in Relation to the Literature

Emotional intelligence involves the ability to accurately perceive and regulate emotions necessary to promote emotional and intellectual growth (Yin et al., 2013). The primary purpose of this research study was to explore pre-service teacher perception of instructor EI and the cognitive and/or affective attributes that foster student engagement. Participants in this study most identified instructor EI with support and empathy. This confirms a study by Arghode (2013) in which students responded more favorably to instructors who they believed genuinely cared about their progress. This was demonstrated through student enthusiasm to participate and readiness to contribute in class (Arghode, 2013). Bloom (Krathwohl, Bloom, & Masia, 1964) identified three domains for learning: (a) cognitive, (b) affective, and (c) psychomotor. Education has focused primarily on the revised cognitive levels of learning: remembering, understanding, applying, analyzing, evaluating, and creating (Clark, 2015). The affective domain deals with values, feelings, attitudes, and motivation, and as shown in Table 9, is divided into five levels of learning. The lowest level, receiving, requires students to listen with

awareness and be prepared to participate in activities, moving up to the highest level, characterizing and internalizing, wherein instruction makes a change in a student's belief or value system. Instruction that is interesting and enjoyable perceivably would be the catalyst for student engagement (Kahu et al., 2015). Research has shown, and this study confirms students who feel connected with instructors through support and encouragement possess a drive to achieve and perform (Arghode, 2013). Arguedas et al. (2016) found higher student performance in classrooms where instructors encouraged emotional awareness through teaching practices. This was corroborated in the current study with interview participants being strongly motivated to success due to instructor and advisor interest and support. Teaching practices observed that strongly support high performance include: safe, respectful classroom discussion; empathetic listening and positive connections; stress validation; and meaningful, relevant work.

Table 9

Bloom's Taxonomy: The Affective Domain

Level of Learning	Instructional Engagement
Receiving (low)	Awareness and willingness to pay attention to learning (Listen with engagement, participate in activities)
Responding	Active participation in instructional activities, awareness and willingness to respond (Suggest, interpret, write feedback)
Valuing	Accepting or rejecting the worth or attaching value to a particular object, phenomenon, or behavior (Accept stance or action)
Organizing & Conceptualizing	Organize values into priorities then create personal value system by comparing different values. (Qualify & quantify personal views, state personal beliefs)
Characterizing & Internalizing (high)	Make behaviors consistent with value system (Use self-regulation skills in learning)

Note. The Affective Domain of Learning. Adapted from “Bloom’s Taxonomy of Learning Domains,” by D. Clark, 2015. *Performance Juxtaposition Site*. Retrieved from <http://nwlink.com>

New teacher support is critical in their first five years in the profession (Haynes & Maddock, 2014). In a teaching context, greater efficacy in accurately perceiving and positively regulating emotions could help teachers form supportive interpersonal relationships, which may generate perceptions of higher levels of social support from administrators and colleagues (Ju et al., 2015). At the time of this research study, the PSTs were self-confident in their abilities, maintained a support network, future focused on personal and professional goals, and identified strategies to manage stress although admittedly were not always successfully used, all hallmarks of high EI (Arghode, 2013). Saarni (1999) identified eight components of emotional

competency important to the practice of teaching:

- Awareness of personal emotions
- Ability to discern and understand others' emotions
- Ability to use vocabulary of emotions and expression
- Capacity for empathetic involvement
- Ability to differentiate subjective emotional experiences from external expression
- Adaptive coping with adverse emotions and distressing situations
- Awareness of emotional communication within interpersonal relationships
- Capacity for emotional self-efficacy

Similar strengths were found in the study participants with noted limitations in adaptive coping, capacity for emotional self-efficacy, and personal awareness of emotions. Mohzan, et al. (2013), found similar results in their quantitative study of 1214 pre-service teachers, however in their study respondents were keenly aware of their own emotions but less aware of others' emotions. Mohzan et al. (2013), similarly found the lowest mean ability was in respondent regulation of their own emotions. If EI develops over time and with age (Mayer et al., 2004), the challenge may be in creating instructional opportunities to develop EI competencies important to teaching particularly in regulation of emotion. As found in this study, instructor use of story and real-life examples in educational practice provided a foundation for students to build empathetic bridges toward student advocacy. Training modules to develop emotional regulation competencies in stress recognition and management; emotional monitoring and modulating positive and negative emotions may assist build new teacher capacity for long-term stress management. Schutte and Loi (2014) maintain sharpened perception, understanding, and regulation of emotion may promote [teacher] autonomy over workplace situations, encouraging a greater sense of control

and in satisfaction in life. Studies also support the finding that individuals who are adept in regulating their emotions enjoy more positive relationships with others (Houghton et al., 2012). This in turn leads to greater perception of self-efficacy in their work environment, which may be perceived as more supportive (Houghton et al., 2012; Johnson, Batey, & Holdsworth, 2009). Individuals with higher EI have a greater sense of control over their work and both higher EI and greater sense of control are associated with better mental health. Houghton et al., (2012), proposes emotion regulation be incorporated in college coursework to promote better understanding of personal stressors and to help further practical coping behaviors which may curtail new teacher burnout. Vesely et al. (2014), also advocates EI training curriculum within pre-service teacher education to boost teacher resiliency, self-efficacy, and well-being.

Training models focused on teacher exploration of individual self-awareness has produced positive changes in behavior (Hen & Sharabi-Nov, 2014), however EI training focused on building specific EI competencies has not been broadly recognized in teacher training models. Specific EI competencies identified by Yin et al. (2013) as essential for classroom teaching include: maintaining emotional relationships, honing emotional awareness, cultivating emotional intrapersonal beliefs, and enhancing emotion management. This study found eight out of 12 PSTs had little knowledge of the term 'emotional intelligence' prior to participation in the interview portion of the study. Although PSTs were aware of social and emotional learning (SEL) and learning frameworks pertaining specifically to student education, the tenets of EI were unknown prior to their participation in this study. Development of a common language of EI and emotional competency specifically in relation to teacher education is suggested for consistency within teacher education programs and new teacher professional learning.

Limitations

Limitations to this qualitative case study include the lack of generalizability of the study results, as this study was conducted at one unique state college location. This case study involved the perspectives of one group of pre-service teachers and may not reflect the behaviors of similar groups of pre-service teachers. Additional limitations may include the self-report method of surveys and participant experiences, or biases that may factor in response to interview questions. Patton (2002) contends observational data may constrain data due to observer bias or a limit on what an observer can see. The primary researcher is a former educator and current school administrator in the county where the study took place. This role presumes certain inherent biases due to the position such as context and educator training, subjective perceptions, and teacher expectations. To reduce biases, the researcher conducted the study according to a case study protocol and database, member checking of interview transcripts, and triangulation of data sources. The homogeneity of the sample was an unexpected limitation. All participants were female and between the ages of 20 and 29. This lack of diversity in sampling occurred due to the voluntary nature of the sampling procedure. Research has indicated EI is developed over time with age and experience (Dumitriu, Timoft, & Dumitriu, 2014). This lack of diversity in study participants may have impacted the study findings due to the overall student demographic.

Implications of the Results for Practice, Policy, and Theory

Teaching is an emotional practice that demands strong emotional commitment as well as content knowledge and instructional best practices. The results of this study have the following implications for the practice of teaching and pre-service teacher education. In the workplace, understanding, negotiating, and monitoring the intense emotionality is a primary dimension of teachers' work which may place elevated stress on teachers' EI. Emotional intelligence may be

beneficial for teachers' psychological well-being and may offer a protective effect in reducing burnout. It is suggested that pre-service education programs incorporate emotional intelligence competency building to enhance teachers' expertise and ability to perceive and regulate the emotions of themselves and others. Emotional skills required in classroom teaching include: (a) creating emotional relationships with students to benefit instructional engagement, (b) sharpening emotional awareness in self and others, (c) improving emotional intrapersonal beliefs for reflective practice, (d) providing emotional interpersonal guidelines, and (e) enhancing emotion management in self and others (Yin et al., 2013).

Recommendations for Further Research

This qualitative case study yields directions for future research. Future study should investigate diverse samples of pre-service teachers in different programs of study including exceptional student education and secondary education. Although this study provided evidence of the importance of EI for current pre-service teachers, the first year of professional practice remains another area for future qualitative exploration. Longitudinal studies focusing on early career teachers beginning with their practicum year may yield robust findings to contribute to new teacher retention especially after the first year of teaching. Research of successful regulation of emotion competencies may be explored with an intention to use this research for new teacher training. Additionally, exploration of the facets of EI in relation to professional responsibilities and support to mediate the challenges faced by early career teachers remains a vital area of study for the good and continuance of the teaching profession.

Conclusion

The purpose of this research study was to explore pre-service teacher perception of EI in self and others specifically instructors. This qualitative case study added to the body of literature

on EI in education and educational settings. Data collection for this study consisted of interview, observation, and an online EI survey focused on the following research questions:

- RQ 1: How do pre-service teachers perceive the nature of instructor EI in a state college teacher education program?
- RQ 2: How do pre-service teachers perceive EI in self and others?
- RQ 3: What instructional (cognitive) and/or relational (affective) attributes are most associated with instructor EI?

This study revealed three themes that have the potential to inform the design and structure of future educational programs through increased attention on the value of EI in teaching and teachers' lives.

- Emotional connection through instructor support and empathy
- Emotional awareness through facilitation and use of emotion
- Emotional engagement through instructional attributes

One of this study's participants shared what may be considered the essence of this research study: "The teaching profession is not simply a technical or cognitive practice but a social, relational, and emotional practice. When we take the emotion out of the equation, we take the child out of the equation" (P-12). The connection teachers have with their students is forged from the relationships built with them. Students are not mere test scores and grades, they represent the passion and legacy of every teacher who attended college with a dream and a desire to make a difference in the life of a child. That is not accomplished through bare technical knowledge and skill. It comes through the understanding that each student has the potential for greatness and in respecting the value of individual contributions. The pre-service teachers and instructors who participated in this study honor that understanding as I have been honored to

share their stories.

References

- Abe, J. A. (2011). Positive emotions, emotional intelligence, and successful experiential learning. *Personality and Individual Differences, 51*, 817–822.
doi:10.1016/j.paid.2011.07.004
- Adams, K. A. & Lawrence, E. K. (2015). *Research methods, statistics, and applications*. Thousand Oaks, CA: Sage Publications.
- Allen, D. E., Ploeg, J., & Kaasalainen, S. (2012). The relationship between emotional intelligence and clinical teaching effectiveness in nursing faculty. *Journal of Professional Nursing, 28*(4), 231–240. doi:10.1016/j.profnurs.2011.11.018
- Almutairi, A., Gardner, G. E., & McCarthy, A. L. (2014). Practical guidance for the use of a pattern-matching technique in case study research: A case presentation. *Nursing and Health Sciences, 16*(2), 239–244. doi: 10.1111/nhs.12096
- Altindag, E. & Kosedagi, Y. (2015). The relationship between emotional intelligence of managers, innovative corporate culture and employee performance. *Procedia Social and Behavioral Sciences, 210*, 270–282.
- Arghode, V. (2013). Emotional and social intelligence competence: Implications for instruction. *International Journal of Pedagogies and Learning, 8*(2), 66–77.
- Arguedas, M., Daradoumis, T., & Xhafa, F. (2016). Analyzing how emotion awareness influences students' motivation, engagement, self-regulation and learning outcome. *International Forum of Educational Technology & Society, 19*(2), 87–103.
- ATLAS.ti. (2017). Qualitative Data Analysis [Computer software]. Retrieved from <http://atlasti.com>

- Austin, E. J., Saklofske, D. H., & Mastoras, S. M. (2010). Emotional intelligence, coping and exam-related stress in Canadian undergraduate students. *Australian Journal of Psychology, 62*(1), 42–50.
- Ayiro, L. P. & Sang, J. K. (2012). Emotional intelligence and leadership: A case for quality assurance managers in Kenyan universities. *Emotional Intelligence: New Perspectives and Applications*. In A. Fabio (Ed.), *InTech*, 99–122. doi:10.5772/30999
- Bao, X., Xue, S., & Fong, F. (2015). Dispositional mindfulness and perceived stress. The role of emotional intelligence. *Personality and Individual Differences, 78*, 48–52.
- Barnwell, P. (2015, May 27). The ongoing struggle of teacher retention. *The Atlantic*. Retrieved from <http://www.theatlantic.com>
- Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema, 18*, supl. 13–5.
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report, 13*(4), 544–559. Retrieved from <http://nsuworks.nova.edu/tqr/vol13/iss4/2>
- Benson, R., Fearon, C., McLaughlin, H. & Garratt, S. (2014). Investigating trait emotional intelligence among school leaders: Demonstrating a useful self-assessment approach. *School Leadership and Management, 34*(2), 201–222. doi:10.1080/136324.2013.813450
- Billings, C. E. W., Downey, L. A., Lomas, J. E., Lloyd, J., & Stough, C. (2014). Emotional intelligence and scholastic achievement in pre-adolescent children. *Personality and Individual Differences, 65*, 14–18.

- Boyatzis, R. E. (2009). Competencies as a behavioral approach to emotional intelligence. *Journal of Management Development, 28*(9), 749–770.
doi:10.1108/02621710910987647
- Brackett, M. A. & Katulak, N. A. (2006). Emotional intelligence in the classroom: Skill-based training for teachers and students. *Applying emotional intelligence: A practitioner's guide*. 1–27.
- Brinia, V., Zimianiti, L., & Panagiotopoulos, K. (2014). The role of the principal's emotional intelligence in primary education leadership. *Educational Management Administration & Leadership, 42*(4S), 28–44.
- Buchanan, J., Prescott, A., Schuck, S., Aubusson, P., & Burke, P. (2013). Teacher retention and attrition: Views of early career teachers. *Australian Journal of Teacher Education, 28* (3), 112–129.
- Bulmer, M. G. (1979). *Principles of statistics*. New York, NY: Dover.
- Burmeister, E., & Aitken, L. M. (2012). Sample size: How many is enough? *Australian Critical Care, 25*, 271–274. doi:10.1016/j.aucc.2012.07.002
- Caputo, M. (2017, May 30). Thanks, legislature: 'Exodus' of public school teachers. In Florida Playbook, *Politico*. Retrieved from <http://www.politico.com>
- Caruso, D. R., Salovey, P., Brackett, M., & Mayer, J. D. (2015). The ability model of emotional intelligence. In S. Joseph (Ed.), *Positive psychology in practice* (pp. 545–555). Hoboken, NJ: John Wiley & Sons. doi:10.1002/9781118996874.ch32
- Cazan, A. & Nastasa, L. E. (2015). Emotional intelligence, satisfaction with life and burnout among university students. *Procedia Social and Behavioral Sciences, 180*, 1574–1578.

- Cherniss, C. (2010). Emotional intelligence: New insights and further clarifications. *Industrial and Organizational Psychology, 3*, 183–191.
- Chestnut, S. R. & Cullen, T. A. (2014). Effects of self-efficacy, emotional intelligence, and perceptions of future work environment on pre-service teacher commitment. *The Teacher Educator, 49*(2), 116–132. doi:10.1080/08878730.2014.887168
- Chhabra, H. K. & Kaur, S. (2014). Mindfulness, emotional intelligence, and stress: A correlational study. *Indian Journal of Positive Psychology, 4*(3), 426–428.
- Cho, S., Drasgow, F., & Cao, M. (2015). An investigation of emotional intelligence measures using item response theory. *Psychological Assessment, 27*(4), 1241–1252.
doi:10.1037/pas0000132
- Clark, D. R. (2015). Bloom's taxonomy of learning domains. *Performance Juxtaposition Site*. Retrieved from <http://www.nwlink.com>
- Concoran, R. P. & Tormey, R. (2013). Does emotional intelligence predict student teachers' performance? *Teaching and Teacher Education, 35*, 34–42.
- Concoran, R. P. & Tormey, R. (2012). How emotionally intelligent are pre-service teachers? *Teaching and Teacher Education, 28*, 750–759.
- Costa, A., & Faria, L. (2015). The impact of emotional intelligence on academic achievement: A longitudinal study in Portuguese secondary school. *Learning and Individual Differences, 37*, 38–47.
- Costa, S., Petrides, K. V., & Tillman, T. (2014). Trait emotional intelligence and inflammatory diseases. *Psychology, Health & Medicine, 19*(2), 180–189.
doi:10.1080/13548506.2013.802356

- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Boston, MA: Pearson Education.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage Publications.
- Curci, A., Lanciano, T., & Soletti, E. (2014). Emotions in the classroom: the role of teachers' emotional intelligence ability in predicting students' achievement. *American Journal of Psychology, 127*(4), 431–445.
- Dagiene, V., Juskeviciene, A., Carneiro, R., Child, C., & Cullen, J. (2015). Self-assessing of the emotional intelligence and organizational intelligence in schools. *Informatics in Education, 14*(2), 199–217.
- Dawson, S., Kettler, L., Burton, C., & Galletly, C. (2012). Do people with schizophrenia lack emotional intelligence? *Schizophrenia Research and Treatment, 2012*, 1–8.
doi:10.1155/2012/495174
- Desilver, D. (2014, September 2). School days: How the U.S. compares with other countries. Pew Research Center. Retrieved from <http://www.pewresearch.org>
- DiFabio, A. & Saklofske, D. H. (2014). Promoting individual resources: The challenge of trait emotional intelligence. *Personality and Individual Differences, 65*, 19–23.
- DiFabio, A., & Kenny, M. E. (2015). The contributions of emotional intelligence and social support for adaptive career progress among Italian youth. *Journal of Career Development, 42*(1), 48–59. doi:10.1177/089485345333420.
- Doe, R., Ndinguri, E., & Phipps, S. T. A. (2015). Emotional intelligence: The link to success and failure of leadership. *Academy of Educational Leadership Journal, 19*(3), 105–114.

- Dolev, N. & Leshem, S. (2016). Teachers' emotional intelligence: The impact of training. *International Journal of Emotional Intelligence*, 8(1), 75–94.
- Donaldson, S. I. & Grant-Vallone, E. J. (2002). Understanding self-report bias in organizational behavior research. *Journal of Business and Psychology*, 17(2), 245–260.
- Dulewicz, V. & Higgs, M. (1999). Can emotional intelligence be measured and developed? *Leadership & Organization Development Journal*, 20(5), 242–252.
- Dumitriu, C., Timofti, I. C., & Dumitriu, G. (2014). Evaluation and development of students' emotional competence. *Procedia Social and Behavioral Sciences*, 116, 860–874.
- Eisenhardt, K. M. (1989). Building theories from case study research. *The Academy of Management Review*, 14(4), 532–550.
- Fusch, P. I. & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report*, 20(9), 1408–1416.
- Goleman, D., Boyatzis, R., & McKee, A. (2013). *Primal leadership: Learning to lead with emotional intelligence*. Boston, MA: Harvard Business School Publishing.
- Grehan, P., Flanagan, R. & Malgady, R. G. (2011). Successful graduate students: The roles of personality and emotional intelligence. *Psychology in the Schools*, 48(4), 317–331.
doi:10.1002/pits
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18, 59–82.
doi:10.1177/1525822X05279903
- Hafiz, S., & Chouhan, M. (2015). Impact of emotional intelligence on life satisfaction of university employees. *Indian Journal of Positive Psychology*, 6(3), 315–317.

- Han, H. & Johnson, S. (2012). Relationship between students' emotional intelligence, social bond, and interactions in online learning. *International Forum of Educational Technology & Society*, 15(1), 78–89.
- Hassan, N., Jani, S. H. M., Som, R. M., Hamid, N. Z. A., & Azizam, N. A. (2015). The relationship between emotional intelligence and teaching effectiveness among lecturers at Universiti Teknologi MARA, Puncak Alam, Malaysia. *International Journal of Social Science and Humanity*, 5(1), 1–5. doi:10.7763/IJSSH.2015.V5.411
- Haynes, M. & Maddock, A. (2014). On the path to equity: Improving the effectiveness of beginning teachers. *Alliance for Excellent Education*. Retrieved from <http://all4ed.org>
- Hen, M. & Sharabi-Nov, A. (2014). Teaching the teachers: Emotional intelligence training for teachers. *Teaching Education*, 25(4), 375–390. doi:10.1080/10476210.2014.908838
- Hess, J. D. (2015). Assessing and applying emotional intelligence skills to enhance the student academic experience. In L. Zysberg & S. Raz (Eds.), *Emotional Intelligence: Current evidence from psychophysiological, educational, and organizational perspectives*, (187–206). Hauppauge, NY: Nova Science Publishers.
- Holinka, C. (2015). Stress, emotional intelligence, and life satisfaction in college students. *College Student Journal*, 49(2), 300–311.
- Houghton, J. D., Wu, J., Godwin, J. L., Neck, C. P., & Manz, C. C. (2012). Effective stress management: A model of emotional intelligence, self-leadership, and student stress coping. *Journal of Management Education*, 36(2), 220–238.
doi:10.1177/1052562911430205
- Hui—Hua, Z. & Schutte, N. (2015). Personality, emotional intelligence and other-rated task performance. *Personality and Individual Differences*, 87, 298–301.

- Indhamath, K. (2015, September 02). Emotional intelligence: An essential trait of a strategic CFO. *Institutes of Management Accountants*. Retrieved from <http://linkup.imanet.org/blogs/krishnanand-indhamath/2015/09/02/emotional-intelligence?ssopc=1>
- Ingersoll, R., Merrill, L., & May, H. (2014). *What are the effects of teacher education and preparation on beginning teacher attrition?* Research Report (#RR-82). Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.
- Jaykody, T., & Garmage, P. (2015). Impact of the emotional intelligence on the transformational leadership style and leadership effectiveness: Evidence from Sri Lankan national universities. *Journal of Strategic Human Resource Management, 4*(1), 1–11.
- Jennings, P. A., Brown, J. L., Doyle, S., Oh, Y., Davis, R., Rasheed, D., DeWeese, A., DeMauro, A. A., Cham, H., & Greenberg, M. T. (2017). Impacts of the CARE for teachers' program on teachers' social and emotional competence and classroom interactions. *Journal of Educational Psychology, 109*. doi:10.1037/edu0000187
- Johnson, S. J., Batey, M., & Holdsworth, L. (2009). Personality and health: The mediating role of trait emotional intelligence and work locus of control. *Personality and Individual Differences, 47*, 470–475.
- Ju, C., Lan, J., Li, Y., Feng, W., & You, X. (2015). The mediating role of workplace social support on the relationship between trait emotional intelligence and teacher burnout. *Teaching and Teacher Education, 51*, 58–67.
- Kahu, E., Stephens, C., Leach, L., & Zepke, N. (2015). Linking academic emotions and student engagement: Mature-aged distance students' transition to university. *Journal of Further and Higher Education, 39*(4), 481–497. doi:10.1080/0309877x.2014.895305

- Karim, J. & Weisz, R. (2011). Emotions at work: The role of emotional intelligence and emotional labor in predicting work-family conflict, psychological distress, and life satisfaction. *International Journal of Arts & Sciences*, 4(3), 29–44.
- Kasler, J., Hen, M., & Nov, A. S. (2013). Building emotional competence in educators. *International Journal of Higher Education*, 2(4), 31–41.
- Klazema, A. (2014, June 9). Types of quantitative research for students and researchers. UdeMy. Retrieved from <http://blog.udemy.com>
- Kotze, M. & Nei, P. (2015). The influence of trait- emotional intelligence on authentic leadership. *SA Journal of Human Resource Management*, 13(1), 1–9.
doi:10.4102/sajhrm.v13i1.716
- Krathwohl, D. R., Bloom, B. S., & Masia, B. B. (1964). *Taxonomy of educational objectives, handbook II: Affective domain*. New York: David McKay Company.
- Laborde, S., Lharautenback, F., Allen, M. S., Herbert, C., & Achtzehn, S. (2014). The role of trait emotional intelligence in emotion regulation and performance under pressure. *Personality and Individual Differences*, 57, 43–47.
- Lanciano, T. & Curci, A. (2014). Incremental validity of emotional intelligence ability in predicting academic achievement. *University of Illinois Press*, 127(4), 447–461.
- Lanciano, T. & Curci, A. (2015). Ability emotional intelligence: A privileged way to health. In L. Zysberg & S. Raz (Eds.), *Emotional intelligence: Current evidence from psychophysiological, educational, and organizational perspectives* (19–34). Hauppauge, NY: Nova Science Publishers.

- Lasauskiene, J. & Rauduvaite, A. (2015). Expression of pre-service teachers' emotional competency in their educational practice. *Procedia: Social and Behavioral Sciences*, 205, 103–109.
- Law, K. S., Wong, C., & Song, L. J. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *Journal of Applied Psychology*, 89(3), 483–496. doi:10.1037/0021-9010.89.3.483
- Learn Higher (2008). Analyze this! Learning to analyze quantitative data. Learn Higher. Retrieved from <http://archive.learnhigher.ac.uk>
- Liang, H., Shih, H., and Chiang, Y. (2015). Team diversity and team helping behavior: The mediating roles of team cooperation and team cohesion. *European Management Journal*, 33(1), 48–59. doi:10.1016/j.emj.2014.07.002
- Madalinska-Michalak, J. (2015). Developing emotional competence for teaching. *Croatian Journal of Education*, 17, 71–97. doi:10.15516/cje.v17i0.1581
- Marshall, B., Cardon, P., Poddar, A., and Fontenot, R. (2013). Does sample size matter in qualitative research? *The Journal of Computer Information Systems*, 54(1), 11–22.
- Maskit, D. (2015). Teacher's emotional intelligence, emotional experiences, and professional development. In L. Zysberg & S. Raz (Eds.), *Emotional Intelligence: Current evidence from psychophysiological, educational, and organizational perspectives* (173–186). Hauppauge, NY: Nova Science Publishers.
- Maxwell, S. (2016, May 21). Frustrated, talented teachers leave Florida classrooms in droves. *Orlando Sentinel*. Retrieved from <http://orlandosentinel.com>
- Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2001). Emotional intelligence as a standard intelligence. *Emotion*, 1(3), 232–242. doi:10.1037/1528-3542.t.3.232

- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional intelligence: Theory, findings, and implications. *Psychology Inquiry*, 15(3), 197–215.
- Mayer, J. D., Caruso, D. R., & Salovey, P. (2016). The ability model of emotional intelligence: Principles and updates. *Emotion Review*, 89(4), 290–300.
doi:10.1177/17540739166396667
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Mohzan, M. A., Hassan, N., and Halil, N. A. (2013). The influence of emotional intelligence on academic achievement. *Procedia Social and Behavioral Sciences*, 90, 303–312.
- Oberle, E. & Schonert-Reichl, K. A. (2016). Stress contagion in the classroom? The link between classroom teacher burnout and morning cortisol in elementary schools. *Social Science and Medicine*, 159, 30–37.
- Onen, A. S. & Ulusoy, F. M. (2015). The relationship between pre-service teachers' self-esteem and emotional intelligence levels. *Procedia Social and Behavioral Sciences*, 186, 1163–1168.
- Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd edition). Thousand Oaks, CA: Sage Publications.
- Perera, H. N. & DiGiacomo, M. (2013). The relationship of trait emotional intelligence with academic performance: A meta-analytic review. *Learning and Individual Differences*, 28, 28–33.
- Perera, H. N. & DiGiacomo, M. (2015). The role of trait emotional intelligence in academic performance during the university transition: An integrative model of mediation via

- social support, coping, and adjustment. *Personality and Individual Differences*, 83, 208–213.
- Perera, H. N. (2016). The role of trait emotional in academic performance: Theoretical overview and empirical update. *The Journal of Psychology*, 150(2), 229–251.
doi:10.1080/00223980.2015.1079161
- Perez, J. C., Retrives, K. V., Furnham, A., (2005). Measuring trait emotional intelligence. In R. Schulze & Roberts, R. D. (Eds.), *Emotional intelligence: An international handbook*, (pp.181–201). Ashland, OH: Hogrefe & Huber Publishers.
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *Journal of Psychology*, 98, 273–289.
doi:10.1348/000712606X120618
- Petrides, K. V. (2010). Trait emotional intelligence theory. *Industrial and Organizational Psychology*, 3, 136–139.
- Petrides, K. V. (2011). Ability and trait emotional intelligence. In T. Chamorro-Premuzic, S. von Stumm, and A. Furnham (Eds.), *The Wiley-Blackwell Handbook of Individual Differences* (1st edition) 656–678. West Sussex, UK: John Wiley and Sons.
- Petrides, K. V. (2016). *The sampling domain of trait emotional intelligence in adults and adolescents* [chart]. Retrieved from <http://www.psychometriclab.com>
- Petrides, K. V. (2017). *Intelligence, emotional*. In reference Module in Neuroscience and Biobehavioral Psychology, 1–6. Retrieved from <http://www.psychometriclab.com>
- Phillips, O. (2015, March 30). Revolving door of teachers' costs schools billions every year. NPR. Retrieved from <http://npr.org>

- Polly, S. (2016, August 5). Positive interventions: Bulking up on self-regulation, self-efficacy, and emotional intelligence. *Positive Business DC*. Retrieved from <http://positivebusinessdc.com>
- Poulou, M. S. (2014). How are trait emotional intelligence and social skills related to emotional and behavioral difficulties in adolescents? *Educational Psychology, 34*(3), 354–366. doi:10.1080/01443410.2013.785062
- Powell, K. R., Mabry, J. L., & Mixer, S. J. (2014). Emotional intelligence: A critical evaluation of the literature with implications for mental health nursing leadership. *Issues in Mental Health Nursing, 36*(5), 346–356. doi:10.3109.01612840.2014.994079
- Qualter, P., Gardner, K. J., Pope, D. J., Hutchinson, J. M., & Whiteley, H. E. (2012). Ability emotional intelligence, trait emotional intelligence, and academic success in British secondary schools: A 5-year longitudinal study. *Learning and Individual Differences, 22*, 83–91.
- Raz, S., & Zysberg, L. (2015). Neural correlates of emotional intelligence: A review. In S. Raz & L. Zysberg (Eds.), *Emotional intelligence: Current evidence from psychophysiological, educational and organizational perspectives* (3–18). Hauppauge, NY: Nova Science Publishers.
- Rivers, S. E., Brackett, M. A., Reyes, M. R., Elbertson, N. A., & Salovey, P. (2013). Improving the social and emotional climate of classrooms: A clustered randomized controlled trial testing the RULER approach. *Society for Prevention Research, 14*, 77–87.
- Romney, A. K., Weller, S. C., & Batchelder, W. H. (1986). Culture as consensus: A theory of culture and informant accuracy. *American Anthropologist, 88*(2), 313–338.

- Russo, P. M., Mancini, G., Trombini, E., Baldaro, B., Mavroveli, S. & Petrides, K. V. (2011). Trait emotional intelligence and the big five: A study on Italian children and preadolescents. *Journal of Psychoeducational Assessment*, 30(3), 274–283.
doi:10.1177/0734282911426412
- Saldana, J. (2016). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage Publications.
- Salovey, P. & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality*, 9(3), 185–211.
- Sanchez-Ruiz, M. J., Mavroveli, S., & Poullis, J. (2012). Trait emotional intelligence and its links to university performance: A meta-analytical review. *Learning and Individual Differences*, 28, 20–33. doi:10.1016/j.lindif.2013.08.002
- Saarni, C. (1999). *The development of emotional competence*. New York, NY: The Guilford Press.
- Schutte, N. (2014). Social environment contexts of trait emotional intelligence. *Journal of Human Behavior in the Social Environment*, 24(7), 741–750.
- Schutte, N., & Loi, N. (2015). Connections between emotional intelligence and workplace flourishing. *Personality and Individual Differences*, 66, 134–139.
- Sepehrian, F. (2012). Emotional intelligence as a predictor of academic performance in university. *Journal of Educational Sciences and Psychology*, 2, 36–44.
- Shahid, S. A., Jani, S. H., Thomas, M., and Francis, P. (2015). The relationship between emotional intelligence and teaching effectiveness of lecturers in public and private universities in Malaysia. *International Journal of Social Science and Humanity*, 5(4), 498–412.

- Sheldon, O. J., Ames, D. R., & Dunning, D. (2014). Emotionally unskilled, unaware, and uninterested in learning: Reactions to feedback about deficits in emotional intelligence. *Journal of Applied Psychology, 99*(1), 125–137.
- Shila, J. M., & Seville, A. V. (2015). The impact of the principals' leadership style on teachers' job satisfaction and organizational commitment: An Indian perspective. *Indian Journal of Positive Psychology, 6*(1), 37–43.
- Siegling, A. B., Nielsen, C., & Petrides, K. V. (2014). Trait emotional intelligence and leadership in a European multinational company. *Personality and Individual Differences, 65*, 65–68.
- Siegling, A. B., Vesely, A. K., Petrides, K. V. & Saklofske, D. H. (2015). Incremental validity of the trait emotional intelligence questionnaire-short form (TEIQue-SF). *Journal of Personality Assessment, 97*(5), 525–535. doi:10.1080/00223891.2015.1013219
- Sinha, N. (2014). An analysis of the effect of emotional intelligence and gender on stress levels of management students. *International Journal of Education and Management Studies, 4*(4), 271–276.
- Stoica, R. & Brouse, P. (2013). Information technology project management failures: Pioneering grounded theory exploring the IT project failure trend data sampling selection methodology. *INCOSE International Symposium, 23*, 755–769. doi:10.1002/j.2334-5837.2013.tb03052.x
- Sulaiman, S. W. & Noor, M. Z. (2015). Examining the psychometric properties of the Wong and Law emotional intelligence scale. *Journal of Social Sciences and Humanities, 2*, 81–90.

- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S. Palo Alto, CA: Learning Policy Institute.
- Turculet, A. (2015). Teachers for the 21st century. Will emotional intelligence make the difference? *Procedia Social and Behavioral Sciences*, 180, 990–995.
- Turner, D. W. (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report*, 15 (3), 754–760.
- Urquijo, I., Extremera, N., & Villa, A. (2016). Emotional intelligence, life satisfaction, and psychological well-being in graduates: The mediating effect of perceived stress. *Applied Research in Quality of Life*, 11(4), 1241–1252.
- Vesely, A. K., Saklofske, D. H., & Nordstokke, D. W. (2014). Emotional intelligence training and pre-service teacher well-being. *Personality and Individual Differences*, 65, 81–85.
- Walter, O. & Marcel, A. (2013). Emotional intelligence and teaching self-efficacy as predictors of teaching ability. *Journal of Studies in Education*, 3(3), 57–74.
doi:10.5296/jse.v3i3.3785
- Wang, Y., & Kong, F. (2014). The role of emotional intelligence in the impact of mindfulness on life satisfaction and mental distress. *Springer Science-Business Media*, 116, 843–852.
doi:10/1007/s11205-013-0327-6
- Winsborough, D., & Chamorro-Premuzic, T. (2017, January 25). Great teams are about personalities, not just skills. *Harvard Business Review*. Retrieved from <https://hbr.org/2017/01/great-teams-are-about-personalities-not-just-skills>

- Wurf, G. & Croft-Piggin, L. (2015). Predicting the academic achievement of first-year, pre-service teachers: The role of engagement, motivation, ATAR, and emotional intelligence. *Asia-Pacific Journal of Teacher Education*, 43(1), 75–91.
doi:10.1080/1359866x.2014.9328
- Yale Center for Emotional Intelligence (2013). Emotions matter [pdf]. Retrieved from <http://ei.yale.edu>
- Yang, T. & Koszalka T. A. (2016). Levels of engagement and its application to learning resources. (concept paper), 1–8. Retrieved from <http://ridlr.syr.edu/publications>
- Ye, M. & Chen, Y. (2015). A literature review on teachers' emotional labor. *Creative Education*, 6, 2232–2240. doi:10.4236/ce.2015.620230
- Yin, H., Lee, J., Zhang, Z., & Jin, Y. (2013). Exploring the relationship among teachers' emotional intelligence, emotional labor strategies, and teaching satisfaction. *Teaching and Teacher Education*, 35, 137–145.
- Yin, R. K. (2014). *Case study research: Design and methods*. Thousand Oaks, CA: Sage Publications.
- Yin, R. K. (2016). *Qualitative research from start to finish*. New York, NY: Guilford Press.
- Zeidner, M. & Matthews, G. (2016). Ability emotional intelligence and mental health: Social support as a mediator. *Personality and Individual Differences*, 99, 196–199.
- Zeidner, M., Matthews, G., & Shemesh, D. O. (2015). Cognitive-social sources of wellbeing: Differentiating the roles of coping style, social support and emotional intelligence. *Journal of Happiness Studies*, 1–21. doi:10.1007/s10902-015-9703-z

Zysberg, L., Orenshtein, C., Gimmon, E., & Robinson, R. (2016, April 11). Emotional intelligence, personality, stress, and burnout among educators. *International Journal of Stress Management*. Advance online publication. doi:10.1037/str0000028

Appendix A: Wong-Law Emotional Intelligence Scale

Component 1- Others' Emotional Appraisal (OEA)

- Always knows his/her friends' emotions from their behavior
- Is a good observer of others' emotions
- Is sensitive to the feelings and emotions of others
- Has good understanding of the emotions of people around him/her

Component 2- Regulation of Emotion (ROE)

- Is able to control his/her temper and handle difficulties rationally
- Is quite capable of controlling his/her own emotions
- He/she can always calm down quickly when he/she is very angry
- Has good control of his/her own emotions

Component 3- Self Emotional Appraisal (SEA)

- Has a good sense of why he/she has certain feelings most of the time
- Has good understanding of his/her own emotions
- Really understands what he/she feels
- Always knows whether or not he/she is happy

Component 4- Use of Emotion (UOE)

- Always sets goals for himself/herself and then tries his/her best to achieve them
- Always tells himself/herself he/she is a competent person
- Is a self-motivated person
- He/she would always encourage himself/herself to try his/her best

Appendix B: Interview Protocol

Research Title: Pre-service Teacher Perception of Instructor Emotional Intelligence

Time of Interview:

Date:

Place:

Interviewer:

Interviewee:

I am going to ask you some questions today to gather information which will help me to understand your perception of emotional intelligence in self and others, and its relation to life satisfaction and teaching. This information may help in future teacher trainings and instructional design. I will be asking different types of questions. I would like you to be completely honest in your answers. You do not need to indicate if your responses are based on a current instructor or past instructor. If you do not wish to respond to a question, please just say so.

I would like to thank you for your participation today. I have scheduled this interview for 30 minutes, however please take as little or as much time as you need to respond to the interview questions.

Appendix C: Interview Questions

Section 1:

1. What is your current major at [Institution name redacted]?
2. Why did you choose this major?
3. Do you have a person(s) who encourages or supports you in the program?
4. What are some things that help you stay motivated in your program?
5. What do you most look forward to in your education?

Section 2:

6. Do you find it difficult expressing or sharing emotions with others? Why or why not?
7. Do you feel it difficult to adjust to change and/or remain flexible to circumstances? Why or why not?
8. On a scale of 1-5 with 1 being perceived little stress management skills and 5 being having many tools for managing stress, how would you rate your stress-management skills? What tools or skills (if any) do you frequently use?

Section 3:

9. Tell me what the term emotional intelligence means to you.
10. On a scale of 1-5 with 1 being not often and 5 being most all the time, how often are you consciously aware of how you are feeling? Can you give me an example?
11. Do you consider yourself a good observer of others' emotions? Example?
12. Was there ever a class period this term when you knew what a fellow student, professor, or other peer was feeling as they entered the room? Can you describe the specific incident? What was your response?
13. Can you think of a time in the past few weeks that you displayed some of your own emotions in the classroom? Can you describe the specific incident? What were these emotions in response to?

Section 4:

14. What emotional qualities do you think are important in teaching and instruction?
15. What are some specific actions your instructor uses either in teaching or topic content you find especially engaging?

16. Think of an education class you have taken either face-to-face or online. Can you tell me about a time when you were very aware of the emotional state of your instructor, or felt the instructor had used emotions to aid instruction?
17. Think of an education class you have taken either face-to-face or online. Can you tell me about a specific lesson where you felt excited or enthusiastic about the topic? What made you feel that way?
18. Do you recall a specific classroom event or activity where the class displayed enthusiasm about a topic and the instructor seemed to alter the lesson based on student excitement? Can you describe the specific incident/incidents?
19. Think about these words (See attached handout). Which ones do you feel are most important for instruction?

Appendix D: Emotional Intelligence Handout

A Primer for Emotional Intelligence

What is Emotional Intelligence? It is the capacity for recognizing our own feelings and those of others, for motivating ourselves and for managing emotions in ourselves and in our relationships. According to Elias et al. (1997), emotional intelligence is necessary to understand and express your emotions to meet the requirements of day-to-day living, learning, and relating to others. Emotional intelligence is based on five competencies: Self-awareness, self-regulation, motivation, empathy, and social skills. The characteristics below each category represent indicators for each competency.

Personal Competence <i>(how we manage ourselves)</i>	Social Competence <i>(how we handle relationships)</i>
Self-Awareness Emotional awareness Accurate self-assessment Self-confidence	Empathy -Understanding others Developing others Service orientation Leveraging diversity Political awareness
Self-Regulation Self-control Trustworthiness Conscientiousness Adaptability	Social Skills Influence Communication Conflict management
Motivation Achievement drive Commitment Initiative Optimism	Leadership Change catalyst Building bonds Collaboration & cooperation Team capabilities

Adapted from Daniel Goleman et al., 2013. Primal Leadership: Learning to lead with emotional intelligence.



Elias, M.J., Zins, J.E., Weissberg, R.P., Frey, K.S., Greenberg, M.T., Haynes, N.M., Kessler, R., Schwab-Stone, M.E., & Shriver, T.P. (1997). *Promoting social and emotional learning: Guidelines for educators*. Alexandria, VA: Association for Supervision and Curriculum Development.

Appendix E: WLEIS Permission

Thank you very much for your reply and supplementary readings. The additional readings added much to my knowledge base on EI studies.

I would like to use the 16-item EI scale that includes emotional labor items as referenced in your study of leader and follower emotional intelligence.

I appreciate your help.

Chi Sum Wong (MGT) [Email redacted]

Dear Catherine,

So far as you are using the scale for non-profit making research projects, feel free to use it. Good luck to your work.

Regards,

C.S. Wong

Dept. of Management

The Chinese University of Hong Kong

Appendix F: Premises Permission Letter

April 19, 2017

RE: Permission to Conduct Research Study

I am writing to request permission to conduct a research study at your institution. I am currently enrolled in the doctoral program at Concordia University in Portland, OR, and am in the process of writing my dissertation. The purpose of my study is to investigate how pre-service teachers perceive instructor emotional intelligence.

I request [Institution name redacted] allow me to recruit 12 pre-service teachers from the College of Education to participate in a case study consisting of semi-structured interviews, observation, and a survey. Interested students, who volunteer to participate, will be given a consent form to be signed (copy enclosed) and returned to the primary researcher at the beginning of the data gathering process.

If approval is granted, the principal investigator will conduct one face-to-face or video interview with student participants. Student participants will also complete an online emotional intelligence survey. Observations will take place during a face-to-face classroom setting at approved times and locations with permission. The survey results will be pooled for the thesis project and individual results of this study will remain confidential and anonymous. Should this study be published, only pooled results will be documented. No costs will be incurred by either [Institution name redacted] or the individual participants.

Your approval to conduct this study will be greatly appreciated. I will be happy to answer any questions or concerns that you may have. You may contact me at my email address: [Researcher email and phone number redacted]. Thank you for your time and consideration in this matter.

Sincerely,

Catherine Deane

Enclosures

cc: Dr. Jillian Skelton, Research Advisor, Concordia University: Portland

Appendix G: Institutional Review Board Approval

June 26, 2017

Ms. Catherine Deane
Doctoral Candidate
Concordia University
2811 NE Holman Street
Portland, Oregon 97221

Re: Pre-Service Teacher Perception of Instructor Emotional Intelligence

Dear Ms. Deane,

I am pleased to inform you that after carefully reviewing the above referenced research project, it has been decided that it is exempt from a full board review, and thus, has been approved through our expedited review process. Full IRB review exemption for your project is based on exemption category (1) of CFR Title 45, Part 46:

- Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special educational instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

If you have any questions regarding this process, you may contact me at your earliest convenience.

Good luck with this research.
[Research site information redacted]

Appendix H: Descriptive Statistics

Table H.1

Descriptive Statistics for the Wong Law Emotional Intelligence Survey (N=12)

<i>Scale</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mdn</i>	<i>M</i>	<i>SEM</i>	<i>SD</i>
WLEIS	75	101	97.50	93.75	2.375	8.228

Note. *Mdn*=median; *M*=mean; *SEM*=standard error of the mean; *SD*=standard deviation.

Table H.2

Scale Statistics (N=12)

<i>Scale</i>	<i>LL</i>	<i>UL</i>	<i>M</i>	<i>Skewness</i>		<i>Kurtosis</i>
				<i>Statistic</i>	<i>SE</i>	
WLEIS	75	101	93.67	-1.236	.637	.864

Note. *Mdn*=median; *SEM*=standard error of the mean; *SD*=standard deviation.

Table H.3

WLEIS Confidence Levels

<i>Scale</i>	<i>M (SD)</i>	<i>95% CI</i>	
		<i>LL</i>	<i>UL</i>
WLEIS	93.67	88.44	98.89

Note. CI = confidence interval; *LL*= lower limit; *UL* = upper limit.

Table H.4

Tests of Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	<i>df</i>	Sig.	Statistic	<i>df</i>	Sig.
Use of Emotions	.163	12	.200	.908	12	.201
Self Emotional Appraisal	.243	12	.048	.849	12	.036
Regulation of Emotion	.161	12	.200	.941	12	.507
Others' Emotional Appraisal	.241	12	.53	.880	12	.087

Table H.5

Descriptive Statistics by Component

WLEIS Component	<i>N</i>	<i>LL</i>	<i>UL</i>	<i>M</i>	<i>Mdn</i>	<i>SD</i>	Skewness		Kurtosis
							Statistic	<i>SE</i>	
Others' Emotional Appraisal	12	17	28	24.42	25.00	3.118	-1.287	.637	1.880
Regulation of Emotion	12	15	25	21.25	21.50	2.800	-.904	.637	1.002
Self Emotional Appraisal	12	15	27	23.33	24.50	3.447	-1.458	.637	2.192
Use of Emotions	12	20	27	24.67	25.00	2.015	-1.052	.637	1.308

Appendix I: Statement of Original Work

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University-Portland Academic Integrity Policy during the development and writing of this dissertation.
2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the *Publication Manual of The American Psychological Association*.

Catherine D. Deane
Digital Signature

Catherine D. Deane
Name (Typed)

February 22, 2018
Date