THE RELATION OF INSTRUCTOR EMOTIONAL INTELLIGENCE WITH CLASSROOM CLIMATE IN EVENING MASTERS' PROGRAMS FOR ADULTS

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TABLE OF CONTENTS

ACKNOWDEGEMENTS ……..……ii

LIST OF TABLES……..……....vii

ABSTRACT...……...……....viii

CHAPTER

1. **INTRODUCTION**…..……1

Introduction to the Study……...1

Purpose of the Study……...…….10

Research Question……..….10

Conceptual Foundation……....11

Intelligence……...12

The Connecting Classroom and Classroom Environment…...……17

Design……..……..…….……18

Limitations…….……..20

Assumptions…….……20

Definitions……20

Significance……..21

Summary……..22

2. **REVIEW OF RELATED LITERATURE**……...……...24

Need for emotionally intelligence instructors……..24

Intelligence……...26

Emotion……29

Development and Definition of the Emotional Intelligence Construct……...30

Emotional Intelligence Models……35

The MSCEIT……39

Post-baccalaureate trends……43

The Connecting Classroom an Classroom Environment……45

The Adult Classroom Environment Scale……...48

Relationship between EI and the ACES……..50

Summary……52

3. DESIGN……..53

Description of the Design……...53

Missing Data……55

Population……56

Mayer-Salovey-Caruso Emotional Intelligence Test……..57

The Perceiving Branch of the MSCEIT……..65

The Facilitating Thought Branch of the MSCEIT……...65

The Understanding Emotions Branch of the MSCEIT……66

The Managing Emotions Branch of the MSCEIT……...66

Adult Classroom Environment Scale……..67

Procedures……70

Data Analysis Design……...71

Summary……..73

4. RESULTS……...……74

Data Analysis……...75

Participant Description……76

Instructor Demographics……..76

Instructors' MSCEIT results……78

TEI score and Four MSCEIT dimensions……79

Student Demographics……81

Students' ACES scores……82

Instructors' Descriptive Statistics by ACES subscale scores…….……...…..87

Instructors' correlation analysis for TEI and ACES subscales……88

Partial Correlation……91

Summary of Results……....93

5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS……95

Overview of the Study……....95

Design and Procedures……....97

Summary of the Results……..99

TEI score and Organization and Clarity ACES subscale……....99

TEI score and Affiliation ACE subscale……100

Partial Correlations……100

Limitations……101

Discussion……..102

Lack of Significant Findings…….……102

TEI and ACES Organization and Clarity subscale……103

TEI score and ACES Affiliation subscale score……104

Partial Correlation……..104

Conclusions……105

Recommendations for research and practice…….106

Instructor TEI and the Connecting Classroom……..…….107

References……...109

Appendices.....119

Appendix A IRB Communication…….....120

Telephone and email Script…….120

Appendix B ACES Consent and Survey Forms……123

ACES Informed Consent…….123

Adult Classroom Environment Scale…….……..125

Cover Sheet for ACES response……..135

Appendix C Purpose and Consent Form for the MSCEIT……..136

Purpose of the MSCEIT……...136

MSCEIT Informed Consent…….138

MHS MSCEIT Copy Right Policies……141

VITA……...147

LIST OF TABLES

Table 1 Overview of MSCEIT Scores…..…….……60

Table 2 Guidelines for Interpreting MSCEIT Scores and Categories for this Study…….63

Table 3 Reliability Coefficients for ACES Subscales……...69

Table 4 Instructor Demographics…….…….…77

Table 5 Guidelines for Interpreting MSCEIT Scores and Categories…….……..79

Table 6 Instructors' Descriptive Statistics of four MSCEIT Dimensions……..…81

Table 7 Instructor, Content, and Program Type Summary ……...……82

Table 8 Student Descriptive Statistics for the seven ACES Subscales…….....83

Table 9 Descriptive Statistics for each Instructor by ACES Subscales…….…….....85

Table 10 Correlation: Instructor's Total EI, four MSCEIT Dimensions, seven ACES subscales, and variables…….…….....89

Table 11 Correlation analysis for instructor TEI, and seven ACES subscales….…….90

Table 12 Partial Correlation…….....92

THE RELATION OF INSTRUCTOR EMOTIONAL INTELLIGENCE WITH CLASSROOM CLIMATE IN EVENING MASTERS' PROGRAMS FOR ADULTS

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ABSTRACT

With the increase of adult students on college campuses in masters' level programs, instructors and administrators need to respond sensitively to a diverse, blended population of students. The study explored if there was a relationship between instructor Emotional Intelligence (EI) and adult evening masters students' perception of classroom climate, using the subscales of the Adult Classroom Environment Scale (ACES) and the instructor's total emotional intelligence (TEI) as measured by the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). Associations between instructors' TEI and the following five variables were also explored: program type (cohort or non-cohort), student age, course content, class size, and student gender. The classroom was the unit of analysis.

The MSCEIT was administered to each of eleven instructors in two higher education institutions in a Midwestern town. The ACES was administered to each of those eleven instructors' students. Major analysis of the research question was done using correlation analysis. The seven ACES subscales were correlated with the MSCEIT TEI. Correlation was also done to determine if program type, student age, classroom size, or course content were associated with instructor's TEI or the seven ACES subscales.

Only two of the seven ACES subscales, Organization and Clarity, and Affiliation, had statistically significant relationships with TEI. Conclusions for the study included the following:

1. The research findings suggested that TEI may not be as related to perceptions of classroom climate as the literature suggests.

2. Maybe the number of instructors was not large enough or maybe the wrong places were chosen to research.

3. Program Type and Content were found to be confounding variables and deserve additional study.

4. The study itself may have not been robust enough to identify relationships that may indeed exist between instructors' emotional intelligence and measures of classroom climate.

Implications for future research include obtaining a larger number of instructors in evening masters programs that would contribute to a more robust study, and broadening the study to include other types of programs and instructors and students in other parts of the country.

CHAPTER ONE

Introduction to the Study

Lifelong learning contributes to not only personal satisfaction, but eventually to positive societal changes. Through helping adults acquire knowledge, skills, and values, adult educators have the privilege and the opportunity to facilitate adult learners toward self-actualization and gratifying rewards in the family, the workplace, and the classroom. Emotional intelligence is a framework to organize individual differences in abilities relative to emotions. Emotionally intelligent people may have the capacity to increase favorable reciprocity with a relationship. The area of Adult Education is multi-faceted. Several of the facets I want to explore are instructor's emotional intelligence, adult evening graduate students' perceptions of classroom climate, and the connecting classroom.

Teaching is an emotional practice (Hargreaves, 1998). Emotions reflect crucial information about relationships (Cobb & Mayer, 2000). According to Sergiovanni (1994), the heart/art of the professional ideal in teaching is making the commitment to care about students. Teaching is an art; a process that has been defined as caring about the transfer of habits, knowledge, and attitudes (Apps, 1981). This artful process involves changing, shaping, or controlling behaviors (Apps, 1981). This process can be thought of in terms of intellectual growth, development of competencies and/or fulfillment of potential. Teachers enable change to occur in the personal, social, and industrial habits of another individual (Hofinger & Lehman, 1995). Teachers' beliefs in their personal

teaching efficacy have a positive relationship to teachers maintaining a secure, accepting classroom climate; supporting student initiative; and caring about meeting the needs of all their diverse student population (Guyton & Wesche, 2005). These beliefs can be applied to the non-traditional adult student. The instructor of the non-traditional adult student must determine the mix of the group in the class (student age, work roles, family role, financial obligations), in responding to the needs of the non-traditional adult student (Hofinger & Lehman, 1995). Teaching the non-traditional student requires that the instructor: 1) recognize that their motivations differ from those of traditional student just finishing her/his high school career, 2) learn how those differences affect her/his teaching methods and the learning experience, and 3) modify procedures both inside and outside the classroom in order that nontraditional adult students capture maximum benefit from their academic labors (Hofinger & Lehman, 1995).

How does one define the adult non-traditional student? When examining the literature, several problems of definition became evident. The diversity of the group labeled nontraditional has been discussed by researchers (Marlow, 1989). For instance, among nontraditional women students, such diverse populations as the displaced homemaker, the empty nest mother, the blue collar wife are included (Marlow, 1989). Because of the lack of studies that have adequate sample size, generalizations are limited (Marlow, 1989).

The term “nontraditional” in a great deal of the literature refers to students who are age 25 and older (Kim, 2002). Researchers have examined “distinctive characteristics and identified programmatic needs of the nontraditional student population at community

colleges by using age as the primary criterion" (Kim, 2002, p. 76). The 25-year old and older students juggle school with employment, family, and financial responsibilities (Ely, 1997). Student background characteristics including ethnicity and socioeconomic status, students who are independent of their parents' support, part-time students, students without high school diplomas, and students who are single parents have also been used to define the nontraditional student (Kim, 2002).

Nontraditional students are also defined through at-risk behaviors. This definition centers on behaviors that are subject to change through interventions at various stages in the educational experience of a student (Kim, 2002). At risk behaviors include: 1) delaying postsecondary enrollment at least one year or more after high school graduation, 2) attending part-time, 3) being financially independent of parents, 4) working full time, 5) having dependents other than a spouse, 6) being a single parent, and 7) not having a high school diploma (Compton & Cox, 2006).

Social integration is very important to the nontraditional student. Since most of this socializing takes place in the context of the classroom, faculty plays a pivotal role in this process (Ely, 1997). The nontraditional student places great value on active and collaborative learning approaches (Ely, 1997) Since cultural and socioeconomic diversity have changed student demographics over the last thirty years (Donaldson & Graham, 1999), what social conditions and psychological influences might bridge the nontraditional graduate student's collegiate experience, enabling the nontraditional graduate student to grow intellectually, develop competencies, fulfill their potential, and ultimately allow new meanings to be made?

Emotional intelligence (EI) requires precise and discriminating assessment and communications "of emotions in oneself and others and the regulation of emotion in a way that enhances living" (Mayer, DiPaolo, & Salovey, 1990, p. 772). EI is a type of emotional information evolving that includes authentic evaluation of emotions in oneself and others, suitable and useful communication of emotion, and adaptive regulation of emotion in such a way as to improve living (Salovey & Mayer, 1990).

The emotionally intelligent contributes to logical thought and in general, to intelligence (Mayer, DiPaolo, & Salovey, 1990).The ability model of emotional intelligence (EI) defines EI as a set of abilities and postulates about "the importance of emotional information and the potential uses of reasoning well with that information" (Cobb & Mayer, 2000, p. 14). Because emotions "reflect critical information about relationships, the concept of EI legitimizes the discussion of emotions in schools and other organizations"(Cobb & Mayer, 2000, p.14). According to the emotional intelligence perspective, an emotionally intelligent instructor helps students develop the capacity to make decisions on their own in their own context. This type of educating is knowledge-based and is aligned with the ability model of emotional intelligence (Cobb & Mayer, 2000). Does the emotionally intelligent instructor influence higher-order thinking through empathic teaching (Cobb & Mayer, 2000), with the connecting classroom serving as the "psychological" bridge (Donaldson & Graham, 1999)?

Deciding to go back to school for a graduate degree after being away from the academic landscape for a while is not a decision for the faint of heart. For many, the key to success in graduate school, especially for the nontraditional student, "is less related to

academic challenges than it is to surviving difficulties that arise in primary relationships" (Brus, 2006, p. 41). The emotionally intelligent instructor who plans, designs, implements, and supports a "creating" space via the connecting classroom concept for the nontraditional graduate student to bloom professes the heart/art of teaching (Sergiovanni, 1994). For the purposes of this study, the nontraditional adult graduate student is defined as students over 21 years or older, enrolled in evening or weekend master's degree program in participating institutions of higher education Although the term nontraditional adult graduate student is difficult to define, further research that addresses the diverse physical, social, intellectual, instructional, and emotional needs of these students warrants exploration.

Adult students are enrolling on college campuses at the master's graduate level in evening classes in increasing numbers, thus creating the need for teachers and administrators to sensitively respond to a diverse, blended population of graduate students. Enrollment of persons 25 and over rose by 17%. This enrollment change is particularly true at the master's level as adults prepare for new careers or job advancement. Enrollment rose 57% (retrieved on July 1, 2007, from www.nces.ed.gov/fastfacts/display.asp?id=98).

The National Center for Education Statistics (NCES) (retrieved on September 13, 2006, from http://nces.ed.gov/fastfacts/display.asp?id=98), noted that enrollment of persons 25 and over rose 17% between 1990 and 2004. The NCES projects a 15% enrollment increase of persons 25 years and older from 2004 to 2014 (retrieved on December 29, 2006, from http://nces.ed.gov/fastfacts/display.asp?id=98). Because life

spans have increased, earlier and longer retirements, expanded options for new careers, and emphasis on self-actualization in retirement, the investment of time, finances, and effort in formal college study is justified (Butler, 2004). The need to integrate new technologies into the workplace, job changes, and career changes has raised the importance of post baccalaureate education (Kohl & LaPidus, 2000).

One of the growing areas in higher and adult education is the graduate master's degree program, showing an increase of 14% between 1994 and 2004 (retreived on July 1, 2007, from www.nces.ed.gov/fastfacts/display.asp?id=98). For example, there are two universities/colleges in mid-Missouri that have strategically chosen to offer graduate evening programs specifically for adult learns in three masters' level graduate programs.

While most research for the past three decades has explored the adult undergraduate population (Darkenwald, 1987, 1989; Donaldson & Graham, 1999; Graham, Donaldson, Kasworm, & Dirx, 2000; Brockett & Darkenwald, 1987), scant research exists about evening graduate degree climate. Many of the studies on adult undergraduates done over the last 30 years focused on adult students' perceptions of classroom climate. The result of adult undergraduate survey responses was that not only was a positive classroom environment conducive to learning, but also "to the developing of a community of learners within classes" (Donaldson & Graham, 1999, p. 30).

In Donaldson and Graham's (1999) Model of College Outcomes for Adults, the relationships between six elements related to adults' undergraduate collegiate experiences are discussed. These six elements are:

a) prior experience; b) orienting frameworks such as motivation, self-confidence, and value systems; c) adult's recognition or the declarative, procedural, and self-regulating knowledge structures and processes; d) the "connecting classroom" as the central avenue for social engagement and for negotiating meaning for learning; e) the life-world environment and the concurrent work, family, and community settings; and f) the different types and levels of learning outcomes experienced by adults (p. 24).

Meeting the classroom instructional needs of a changing, complex and diverse adult student population is a cardinal task for the adult educator in an evening adult graduate program. In order to make meaning and to foster learning, the classroom psychological and emotional climate is of immense importance to the adult learner (Donaldson, Graham, Kasworm, & Dirx., 1999). Donaldson and Graham (1999) have argued that conventional models of college experiences and outcomes are inappropriate for adult learners; and that new conceptualizations are needed.

According to Donaldson and Graham (1999), most models explaining college experiences and outcomes address traditional-age students, resulting in the substance of the experience for adults in higher education not being captured. Research on traditional undergraduate college student learning, academic performance, and retention reported that "all were associated with the students' interaction with their peers, with faculty, with involvement in out-of-class activities, and with their leadership roles on campus" (Donaldson & Graham, 1999, p. 26). Kasworm's research (2003) also noted three key influences on how adult learners' construct meaning in the undergraduate classroom: "a) the classroom as the defining collegiate context, b) learner views of knowledge in

relationship to their adult life worlds, and c) instructor actions and related program design elements" (p. 84).

Because of conflicting life roles, adult undergraduate learners have difficulty being active in the campus environment (Donaldson & Graham, 1999). In spite of the absence of campus involvement and academic experiences, "adult students learn and develop as much or more as younger students during their undergraduate collegiate experiences" (Donaldson & Graham, 1999, p. 26). This may be the result of life-world experiences that foster the development of different skills, and interactions with their fellow students and faculty (Donaldson & Graham, 1999).

The Model of College Outcomes offered by Donaldson and Graham (1999) is one "that pulls together the literature and research on the adults' undergraduate experience in higher education" (p. 25). This model draws our attention to the importance that the classroom plays for the learning of adult undergraduate students since adult students tend not to be involved in campus activities; rather their form of involvement on the campus is in the classroom (Donaldson & Graham, 1999). The Model takes into consideration how adult undergraduate students "compensate for the different type of undergraduate experience, their different academic backgrounds, and their busy adult lifestyles" (Donaldson & Graham, 1999, p. 26). Does this Model apply to the nontraditional evening adult graduate program? More specifically, is there a relationship between the instructor's emotional intelligence and the connecting classroom concept?

With the graying of America, and the resulting changes in baby-boomer demographics and socioeconomic status, reacculturation into new career choices through

adult education venues demands that the adult evening graduate classroom bridge those pre-existing conditions, life-world experiences, and learning in context so that "new meanings" are made.

Donaldson and Graham (1999) captured this function of the classroom by labeling it the "connecting classroom" for adult undergraduate learners. The connecting classroom is made up of several different ingredients, one of which is a positive learning climate and environment (Donaldson & Graham, 1999).

Research on the adult evening graduate climate is scarce. Moos (1979) had addressed the topic of classroom climate and environment for traditional age and PK-12 students. Moos (1979) defined environment as a "dynamic social system that includes not only teacher behavior and teacher-student interaction but also student-student interaction" (p. 138). According to Moos (1979), environmental factors that influence individuals to exhibit effective and ineffective behavioral responses in a particular social setting can either support or retard the satisfaction of needs.

Darkenwald (1989) has addressed the topic of classroom climate for the adult classroom environment. The social environment theory, according to Darkenwald (1987), deals with "the ways in which interpersonal relationships in a particular social setting help to shape human behavior" and "human behavior in a social setting is a joint function of the individual and his [sic] environment" (p. 127).

Research has shown that a positive classroom environment is supportive of adult learner satisfaction and learning (Donaldson, 1991; Donaldson & Graham, 1999). But how is a positive classroom environment created for adult learners? Responsibility is

primarily that of the instructor (Darkenwald, 1989). Given the fact that the classroom environment is characterized by these multiple emotional elements (e.g., respect, empathy, positive attitude) and dynamics, does the emotional intelligence of the classroom instructor have any relation to the adult students' perceived classroom environment?

Purpose

Therefore, the purpose of this research was to explore the relation, if any and to what extent, between the emotional intelligence of instructors and the actual classroom environment as perceived by adult evening masters' level student. The need for new insight of the nature of adult student learning at the evening graduate masters' program level deserves attention and research.

Research Question

The following question was explored in this study:

What is the extent, if any, of the relationship between Emotional Intelligence (EI) of classroom instructors measured by the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) and student perceived classroom environment as measured by the Real Version of the Adult Classroom Environment Scale (ACES)?

The question was addressed using descriptive statistics, where EI and the classroom environment were described. The correlation statistical process, Pearson Product Moment Correlation, or Pearson *r*, was used to answer this question, offering a

more reliable estimate of correlation, and more precision with a small number of subjects (Fraenkel & Wallen, 2000). The associations between an instructor's total emotional intelligence (TEI) and the following variables were also explored: program type, student age, course content, class size, and student gender. In addition, the relationships between the seven ACES subscales and the four branches of Emotional Intelligence (EI) were explored. This question was addressed using descriptive statistics that detailed the scores of subs4cale branches, and by correlation analysis to explore the association between EI branches and ACES subscale scores. Independent variables were EI, type of institution, program type, and classroom size, age of instructor, course content, and student gender.

Conceptual Foundations

This study rests on three foundations: the construct of Emotional Intelligence (EI); the idea of the "Connecting Classroom," and the construct of a supportive adult classroom climate. The EI framework was based on the work of Mayer and Salovey (1990). This study was also based on the theoretical framework of Donaldson et al., (2000), whose research offers evidence that the connecting classroom is "the center stage of the collegiate experience for the adult" (p. 3). The third framework is classroom climate/environment (Moos, 1979; Knowles, 1980; Darkenwald, 1987; Donaldson & Graham, 1999; Graham, Donaldson, Kasworm, & Dirx, 2000). The classroom environment connects the adult learner to a social context for learning and also shapes the role of the adult college student (Donaldson et al., 2000).

Intelligence

Because so many of these researchers use the word "intelligence," it is important to examine the meaning of intelligence. Since the traditional view of intelligence has focused on mental abilities that involve reasoning, memory, and abstract thinking (Gardner, 1993), I decided to use Sternberg's broader definition of intelligence in this study. Sternberg (1988) stated that intelligence is "essentially a cultural invention to account for the fact that some people are able to succeed in their environment better than others" (p. 71). Sternberg further stated (2000) that the concept of intelligence is "the mental abilities and processes involved in providing an optimal fit between oneself and one's environment" (p. 118). This definition was used in this study. Gardner (2006) has broadened his definition of intelligence as a "bio-psychological ability to solve problems or fashion products that are of consequence in a particular setting or community" (p. 6-7). Intelligence is defined as "the ability to learn or understand or to deal with a new or trying situation (retrieved on June 14, 2007 from http://www.merriam-webster). According to Mayer and Salovey (1997), intelligence is associated with academic ability and a skill taught in schools and is measured with general intelligence tests.

Thorndike (1920) developed an intelligence instrument, testing vocabulary and arithmetic, which was a forerunner of modern day intelligence tests. While the concept of general intelligence, known as *g*, was developed by Charles Spearman (1927), who argued that *g* could be measured by one test, Gardner (1983), Sternberg (1985, 1988), Mayer and Salovey (1997), and Sternberg and Grigorenko (2000) disagreed. They believed that human intelligence involved several types of mental abilities beyond the

skills learned in books and school. According to Sternberg and Grigorenko (2000), academic intelligence is associated more with the traditional definition of intelligence, like memory and analytical skills. Practical intelligence involves skills such as "recognizing and defining problems; allocating resources and formulating strategies to solve problems; and monitoring and evaluating solutions to problems" (Sternberg & Grigorenko, 2000, p. 216). These intelligences are different but complementary and are important for success (Sternberg & Grigorenko, 2000).

Gardner (1983) developed his theory of multiple intelligences, with two of the seven areas of intelligence including "interpersonal" and "intrapersonal" intelligence. Gardner expanded his theory of multiple intelligences in 1993 to include the naturalistic intelligence, which focuses on an ability to understand nature and the environment. Gardner (1983) suggested that the historical view of intelligence ignored the "process" of learning, preferring to focus only on outcomes of learning. According to Mayer and Salovey (1990), Gardner's personal intelligences resemble the concept of emotional intelligence, and "focuses on the recognition and use of one's own and others' emotional state to solve problems and regulate behavior" (p. 189). Personal intelligences, according to Gardner (1983, 2006), included inter and intra personal intelligence and included knowledge about the self and about others.

Salovey and Mayer (1990) described and defined emotional intelligence "as the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 189). EI is an ability-based skill for adequate social functioning, enabling emotionally intelligent

individuals to respond quickly and appropriately to their own feelings because of the accuracy with which they perceive them" (p. 193). Instructors with emotional intelligence understand and know themselves, and have the ability to scan and know the student environment (Mayer & Salovey, 1990).

According to Mayer, Salovey, and Caruso (2000), there are two categories of emotional intelligence theories: mental ability and mixed models. Emotional intelligence, as conceived by Mayer and Salovey (1990) reflects the mental ability model and addresses the capacity to assess, monitor, and use one's own emotions to inform the thinking and behavior of self. In 1997, Mayer and Salovey revised their model of mental ability, by noting that the domains of emotional intelligence are hierarchical and by differentiating mental ability into four branches: the identification, use, understanding, and management of emotion.

Mixed models, on the other hand, expand upon mental ability models to include a range of non-ability, self-reported characteristics like impulse control, persistence, motivation, flexibility, hope, optimism, and delayed gratification (Roberts, Zeidner, & Matthews, 2001). Since the mental ability model addressed the ability to assess, monitor, use and manage one's own emotions to inform thinking and behavior, it was chosen for use in this study. In this case, emotional intelligence is defined as "the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to regulate emotions so as to promote emotional and intellectual growth" (Mayer & Salovey, 1997, p. 167).

The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) is based on the mental ability model. It provides 15 main scores: total Emotional Intelligence Quotient (EIQ), two Area scores, four Branch scores, and eight Task scores (Mayer, Salovey, & Caruso, 2002). There are three supplemental scores in addition to the 15 main scores (Mayer et al., 2002). The total emotional intelligence score provides an overall index of the participant's emotional intelligence. The first Area score includes an Experiential Emotional Intelligence score that presents the participant's ability "to perceive emotional information, to relate it to other sensations such as color and taste, and to use it to facilitate thought" (Mayer et al., 2002, p. 17). A Strategic Emotional Intelligence score is the second Area score. It provides an index of the participant's ability to understand emotional information and how the person strategically uses this emotional information for planning and self-management (Mayer et al., 2002). Area scores permit "the administrator insight into possible differences between a client's ability to perceive and utilize emotions and the client's ability to understand and manage emotions" (Mayer et al., p. 18).

The Emotional Intelligence instrument, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), developed by Mayer, Salovey, and Caruso, is also based on the following four branch scores, which provide information on specific emotional abilities (Mayer et al., 2002):

1) Perceiving Emotions: Skills such as the ability to identify feelings in oneself and others, in art, stories, objects, music, and other stimuli.

2) Facilitating Thought: Skills such as the ability to use emotions to redirect attention to important events, to generate emotions that expedite decision-making; skillful harnessing of different emotions to encourage creative and sensitive problem solving.

3) Understanding Emotions: Ability to understand complex emotions and emotional "chains," how emotions can evolve into another stage, to understand emotional information, and to understand relationships among emotions.

4) Managing Emotions: Skills of self-awareness in self and in others promoting personal understanding and growth, abilities that lead to determining when an emotion is genuine, and abilities to solve emotion-laded problems without quelling negative emotions.

While some psychologists have characterized emotion as chaotic, haphazard, and something to outgrow, others suggested that emotions are primarily motivating factors (Salovey & Mayer, 1990). Emotions as defined by Salovey and Mayer (1990) are "organized responses, crossing the boundaries of many psychological subsystems, including the physiological, cognitive, motivational, and experiential systems" (p. 186). Emotions usually occur in response to an event that has a positive or negative meaning for the individual (Salovey & Mayer, 1990). Research by Brown and Kulik (1977) suggested that some emotions, positive or negative, may perform as energizing forces on memory. Emotions also influence how information is categorized during processing (Isen & Daubman, 1984). Opportunities for the development of potential relationships among stimuli and concepts are enabled by a positive affect (Isen, 1990).

The Connecting Classroom and Classroom Environment

Research has shown that a positive classroom environment is supportive of adult learner satisfaction and learning (Darkenwald, 1987; 1989; Graham, 1998; Donaldson & Graham, 1999; Donaldson, Graham, Martindill, & Bradley, 2000). The Model of College Outcomes developed by Donaldson and Graham (1999) draws our attention to the importance that the classroom plays for the learning of adult undergraduate students. Adult learners tend not to be involved on the campus; rather their form of involvement on the campus is in the classroom (Donaldson & Graham, 1999). Adult learner characteristics (independent, practical, and experienced-oriented learning style, Darkenwald & Merriam, 1992) challenge traditional academic policies and classroom designs (Graham, Donaldson, Kasworm, & Dirx, 2000).

Colleges are re-orienting themselves to provide service to the adult student. Therefore those in faculty/instructional positions as well as in administrative capacities must understand the landscape for what influences adults' learning, what they learn, and how they learn. The connecting classroom includes the following four elements: (a) ethos of an adult-oriented environment, (b) learning of expertise, (c) nature of the teaching learning process, and (d) living in a multicultural learning society (Donaldson, Graham, Kasworm, & Dirx, 1999), all of which are suggestive of Darkenwald's (1989) conception of the adult classroom environment that is conducive to the learning of adults. The connecting classroom metaphor suggests that the teaching/learning process is a climate and a set of interactions both within the classroom and beyond through its generative and reconstructive functions (Donaldson & Graham, 1999).

The topic of classroom climate for the adult classroom as it relates to teacher behavior or style was first examined by Darkenwald in 1989. Classroom climate is "created by the characteristics and interactions of students and teacher" (Darkenwald, 1989, p. 67). According to Darkenwald (1989), teaching style and the classroom social environment interact. Effective teaching occurs when the teacher takes the necessary steps to see that they and their adult students create optimal conditions for learning (Darkenwald, 1989). The Adult Classroom Environment Scale (ACES) was created to assess adult classroom climates (Darkenwald, 1989). The ACES conceptualizes the classroom environment as a "dynamic social system" that includes teacher behavior, teacher-student interaction, and also student-student interaction (Darkenwald, 1989). Two forms of the ACES were produced: Real and Ideal. The "Real" form refers to student perceptions of the "real" or actual classroom environment as students experience it. The ideal form, in contrast, assesses how respondents characterize their preferred classroom environment. Both forms contain identical items, but different directions. Either form can be administered to both teachers and students (Darkenwald, 1989).

Study Design

This research study was quantitative in design, using correlational analysis to explore the relationship between instructor emotional intelligence and the classroom climate in two Midwestern, nontraditional, evening adult master's level college programs. The correlation design was appropriate for this study because little is known about the relationship between an instructor's emotional intelligence and students'

perceptions of classroom climate. Grounded in Mayer and Salovey's (1990) theory of emotional intelligence and Donaldson and Graham's (1999) connecting classroom idea, the connecting classroom is the unit of analysis.

The Adult Classroom Environment Scale (ACES) was administered to assess students' perceptions of actual classroom climate in two university and college programs. The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) was administered to those classroom instructors in the evening adult master's programs in the two Midwestern colleges. The MSCEIT measures abilities of how well people perform tasks and solve emotional problems, rather than asking for their subjective assessment of their emotional skills. The "responses to the MSCEIT represent actual abilities to solve emotional problems;" (Caruso, Mayer, & Salovey, 2002, p. 1) and scores are relatively unaffected by such confounds as self-concept, response set, and emotional state. Scores from the individual instructor MSCEIT response and the ACES scores of that instructor's class as the unit of analysis were correlated to determine if there is a relationship between the emotional intelligence of an instructor and the connecting classroom climate.

The appropriate study design was correlational for exploring the relationships of the emotional intelligence ability of the instructors and the connecting classroom climate. Partial correlation was also employed to explore the influence of covariates on the strength of correlations between the two major variables.

Limitations

With any research, limitations may affect the overall results. The study sample is from a town in the Midwest, taught by adjunct faculty, with academic culture and climate influencing the results. The use of the MSCEIT to measure EI ability is relatively new (Mayer, Salovey, & Caruso, 2002). The MSCEIT instrument was time consuming and may have had an effect on the way the instructor completed the MSCEIT. The use of the self-reporting ACES tool in the study design, reflects individual student perception, and is a limitation. The variance in class size might result in differences in class climate and may have been a limitation.

Assumptions

The following assumptions served as considerations to any conclusions drawn.

1. That participants were honest in their responses.
2. That each participant held assumptions about how emotions are experienced, and how each participant adapts to that emotional experience.

Definitions

1. Intelligence as defined by Sternburg (2000) is "the mental abilities and processes involved in providing an optimal fit between oneself and one's environment" (p. 118).
2. Emotional Intelligence (EI) as defined by Mayer and Salovey (1997) "is the ability to perceive emotions, to access and generate emotions so as to assist

thought, to understand emotions and emotional knowledge, and to regulate emotions so as to promote emotional and intellectual growth" (p. 4).

3. Adult Learners: For the purpose of this study, adult learners are defined as nontraditional working adult graduate students 21 years or older and enrolled in an evening master's degree program at participating institutions of higher education.
4. Classroom in this study refers to a group learning situation led by one instructor within a master's level program designed specifically for adult learners housed in a physical building.
5. Connecting Classroom: the psychological bridge for the adult learner with intentional design by the instructor, which enables conversation exchange between student and instructor, and student and student and subsequently new knowledge creation. It is also a social context that shapes adult student identity (Donaldson & Graham, 1999).
6. Classroom environment: "a dynamic social system that includes not only teacher behavior and teacher-student interaction but also student-student interaction" (Darkenwald, 1989, p. 128). Classroom environment is strongly influenced by the instructor.

Significance

This study supplies significant information to the literature on the relationship between emotional intelligence of the instructor and the classroom climate using the

connecting classroom concept (Donaldson & Graham, 1999). This study seeks to determine if such a relationship exists, and to detail the nature and extent of these relationships.

Summary

Given the rich diversity in experience, demographics, and culture of nontraditional adult students in evening master's level programs, examining the influence of classroom climate on the scope of adult learning and instructor emotional intelligence via the connecting classroom is warranted. Some adult students may be unable to actualize their potential in a classroom environment that does not reflect respect, empathy, hope where the classroom climate does not connect their life world experiences with course content or sensitive instruction (Darkenwald, 1989; Donaldson & Graham, 1999).

The need for new understanding of the nature of evening adult students' perception of classroom environment in a master's program deserves attention and research. The metaphor of the connecting classroom is at the center of learning for the adult learner in the undergraduate classroom (Donaldson & Graham, 1999). The connecting classroom, through intentional, sensitive, and emotionally safe design, offers the adult learner opportunities to engage, converse, pause, reflect, and reconstruct meaning of their life-world structures (Graham, Donaldson, Kasworm, & Dirx, 2000).

In order to help the reader understand the potential relationship of an emotionally intelligent instructor to classroom climate, enabling adult learning to occur, Chapter Two

explores current literature and research on emotional intelligence, classroom climate, and Donaldson and Graham's (1999) connecting classroom idea. Chapter Three includes a description of the design used in this research, including descriptions of the instruments and sampling procedures. Chapter Four presents results, including an analysis of the research question. Chapter Five offers a summary of the results with implications for future practice and research.

CHAPTER TWO

Review of Related Literature

This chapter reviews the literature related to the emotional intelligence construct and the adult learner classroom environment via Donaldson and Graham's (1999) connecting classroom idea. The review of literature is organized to present definitions of intelligence, emotion, emotional intelligence, emotional intelligence models, adult classroom climate, post-baccalaureate trends, connecting classroom idea, the adult classroom environment scale (ACES), the relationship between EI and the ACES, as well as reviewing the development of the emotional intelligence construct. Measurements of emotional intelligence along with criticisms of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) questionnaire, and the ACES are also presented.

Need for emotionally intelligent instructors

Since adult students are enrolling on college campuses at the master's level in evening classes in increasing numbers, the need for teachers and administrators to sensitively respond to this diverse, blended population presents itself (Butler, 2004). This enrollment change is particularly true at the master's level as adults prepare for new careers or job advancement. While most research for the past three decades has explored the adult undergraduate population (Darkenwald, 1987, 1989; Donaldson & Graham, 1999, 2000; Brocket & Darkenwald, 2000; Graham et al., 2000), scant research exists about evening adult master's degree programming. Meeting the classroom instructional

needs of a changing, complex and diverse adult population is a cardinal task for the adult educator in an evening adult master's program. In order to make meaning and to foster learning, the classroom psychological and emotional climate is of immense importance to the adult learner (Graham et al., 2000).

Higher education has long toiled with the components of the learning process: disciplines, knowledge, administrative structures, and community (Cove & Love, 1996). In the past, cultural forces were barriers to redesigning and transforming higher education. Now, the body of research linking the connection between intellectual, social, and emotional instructional practice has evolved into an altered paradigm not only in the social sciences, but also in education (Cove & Love, 1996).

Bruffee (1993), with his collaborative learning philosophy, challenged the conventional practice that the use of lecture was the best method of classroom instruction. According to Bruffee (1993), a collaborative learning design enhances learning by actively incorporating social and emotional interaction between students and between students and faculty, where creating new knowledge is an active, social process, not a passive spectator role. Collaborative learning and other interrelated practices challenged the conventional methods of instruction and learning by acknowledging, addressing, and using social and emotional influences on learning (Bruffee, 1993; Cove & Love, 1996).

The practices of changing the authority structure in learning experiences and use of personal experiences of students have reframed not only individual instructor practice, but also higher education (Cove & Love, 1996). Social context and interpersonal relationships are linked in the role of cognitive development (Cove & Love, 1996).

Further, emotions may enhance or hinder learning, may drive learning and memory, (with a depressed affect correlating with decreased motivation in the classroom) (Cove & Love, 1996).

Adult students bring to the classroom extraordinary life experiences, seasoned learning interests, purposeful educational goals, and sensitive instructional needs that require educators to respond appropriately (Darkenwald, 1989). An intentionally designed orientation by the instructor toward "creating learner-centered activities, personalized instruction, relating learning to students' experiences, assessing student needs, climate building, encouraging student participation in the learning process, and maintaining flexibility" appears to offer potential for contributing to student and instructor success (Miglietti & Strange, 1998, p. 6). Therefore, higher education institutions must attend to member cultural socialization and orientation, through new instructor training programs, and regularly scheduled instructor and professional staff development and reacculturation (Bruffee, 1993).

Intelligence

Sternberg's (2000) concept of intelligence as "the mental abilities and processes involved in providing an optimal fit between oneself and one's environment," (p. 118) Sternberg further stated that intelligence is "essentially a cultural invention to account for the fact that some people are able to succeed in their environment better than others" (p. 71).

The term "intelligence" is used differently by different people (Sternberg, 2000). As early as 1927, Spearman remarked that even the most enthusiastic advocates of intelligence become doubtful of it (Mayer, Salovey, & Caruso, 2000). Whether by human, artificial, or military intelligence, information gathered results in new learning. This new learning requires us to reason with it—implying mental ability associated with cognitive functioning (Mayer et al., 2000). Although intelligence has been conceptualized as abstract thinking, and often predicts some type of success, specifically academic success, it is not a perfect predictor. Since high and low intelligence scores have not explained the amount of variance in success, what can account for individuals' ability to effectively and successfully respond to their environment? Wechsler responded to this inquiry by defining intelligence as involving…"the aggregate or global like capacity of the individual to act purposefully, to think rationally and to deal effectively with his [sic] environment" (as cited by Mayer, Salovey, & Caruso, 2000, p. 399).

Practical intelligence involves skills such as "recognizing and defining problems, allocating resources and formulating strategies to solve problems, and monitoring and evaluating solutions to problems" (Sternberg & Grigorenko, 2000, p. 216). According to Wagner (2000), six attributes are associated with practical intelligence "(adaptation to meet the demands of the environment effectively; real-world manifestations; that which is valued by culture; emotional, motivational constructs; individual differences in mental competence; and overt behavioral manifestations—effective, successful responses):" (p. 389). Practical intelligence is different than academic intelligence but is complementary to academic intelligence and is important for success (Sternberg & Grigorenko, 2000).

Intelligence is also defined as "the ability to learn or understand or to deal with a new or trying situation (retrieved on June 14, 2007, from http://www.merriam-webster). The traditional view of intelligence has focused on mental abilities that involve reasoning, memory, and abstract thinking (Gardner, 1983). Gardner (2006) defined intelligence as a "bio-psychological ability to solve problems or fashion products that are of consequence in a particular cultural setting or community" (p. 6-7). According to Mayer and Salovey (1997), intelligence is associated with academic ability and skills taught in schools and are measured with general intelligence tests.

Thorndike (1920) developed an intelligence instrument, testing vocabulary and arithmetic which was a forerunner of modern day intelligence tests. While the concept of general intelligence, known as *g*, was developed by Charles Spearman (1927), who argued that *g* could be measured by one test, Gardner (1983), Sternberg (1985, 1988), Mayer and Salovey (1997), and Sternberg and Grigorenko (2000) disagreed. They believed that human intelligence involved several types of mental abilities beyond the skills learned in books and school. According to Sternberg and Grigorenko (2000), academic intelligence is associated more with the traditional definition of intelligence, like memory and analytical skills. Practical intelligence involves skills such as "recognizing and defining problems; allocating resources and formulating strategies to solve problems; and monitoring and evaluating solutions to problems" (Sternberg & Grigorenko, 2000, p. 216). These intelligences are different but are complementary and are important for success (Sternberg & Grigorenko, 2000).

Gardner (1983) developed his theory of multiple intelligences, with two of the seven areas of intelligence including "interpersonal" and "intrapersonal" intelligence. Gardner (1983) suggested that the historical view of intelligence ignored the "process" of learning, preferring to focus only on the outcomes of learning. In 1993, Gardner expanded his theory of multiple intelligences to include the naturalistic intelligence, which focuses on an ability to understand nature and the environment. According to Mayer and Salovey (1990), Gardner's personal intelligences resemble the concept of emotional intelligence, and "focuses on the recognition and use of one's own and others' emotional states to solve problems and regulate behavior" (p. 189). Personal intelligences, according to Gardner (1983, 2006), include inter- and intra- personal intelligences and include knowledge about the self and about others.

Emotion

Emotions may have come into existence with early mammalian life, signaling and responding to changes in the environment and to relationships in the environment, in order to survive (Mayer et al., 2000). Emotions follow no rigid time course; but instead, respond to external changes in relationships (or internal perceptions of them)" (Mayer et al., 2000, p. 397). Emotion also interfaces with cognition when good moods lead a person to think positively (Mayer et al., 2000).

While some psychologists have characterized emotion as chaotic, haphazard, and something to outgrow, others suggested that emotions are primarily motivating factors (Salovey & Mayer, 1990). Emotions as defined by Salovey & Mayer (1990) are

"organized responses, crossing the boundaries of many psychological subsystems, including the physiological, cognitive, motivational, and experiential system" (p. 186).

Emotions usually occur in response to an event that has a positive or negative meaning for the individual (Salovey & Mayer, 1990). Mayer recognized emotion as one of three mental constructs: cognition, emotion, and motivation (Barent, 2005). Research by Brown and Kulik (1977) suggested that some emotions, positive or negative, might perform as energizing forces on memory. Emotions also influence how information is categorized during processing (Isen & Daubman, 1984). Positive affect enables opportunities for development of potential relationships among stimuli and concepts (Isen, 1990).

Development and Definition of the Emotional Intelligence Construct

The development of the emotional intelligence (EI) construct may have originated from the failure of intellectual intelligence tests, such as the standard achievement tests (SAT) to forecast success in life. In 1979, Bahn reported that while leaders were frequently more intelligent than average team members, they were not the most intelligent. Bahn (1979) concluded that something more than what was conventionally understood as intellectual intelligence had a consequential effect on whether a leader was deemed to be successful.

From 1979 to 1989 marked the beginnings of new direction in cognition and affect. The term "emotional intelligence" had been used during this period but it had not

been defined probably because the concept was still being developed (Mayer et al., 2002). An unpublished dissertation by Payne (1986) defined emotional intelligence as

> The facts, meanings, truths, relationships, etc. [of emotional intelligence] are those that exist in the realm of emotions. Thus, feelings are facts. The meanings are felt meanings, the truths are emotional truths, the relationships are interpersonal relationships…and the problems we solve are emotional problems, that is, problems in the way we feel (p. 165).

Previous researchers explored intelligence, with intellectual components as their focus. There were a few researchers, however, who previously realized that besides intellectual intelligence, non-intellectual components were also important in determining differences in performance (Cumming, 2005). Thorndike (1920) introduced the term, social intelligence, when contemplating how intellectual intelligence drives success. According to Thorndike (1920), social intelligence was used to define peculiar fluctuations in outcome measures not defined by intellectual ability. In reviewing the predictive power of the intelligence quotient, Thorndike developed the social intelligence construct to explain components of success which intellectual ability could not account for (Stone, 2004).

This view lasted into the 1970s, when Mayer and others explored intelligence and emotion research as disparate areas (Stone, 2004). Research on emotion focused on whether emotions held universal meaning, or if they were defined by culture and context (Stone, 2004). Wechsler, in 1940, made references to such non-intellective components: affective, personal, and social factors, as well as reporting that non-intellective

capabilities were necessary for forecasting an individual's success in life (Cumming, 2005).

While the term "emotional intelligence" had not been described or defined between 1970 and 1989, Gardner in 1983, described the concept as "consisting of adaptive skills, whereby an individual has a deep awareness of his or her emotions and the ability to label and draw upon these emotions as a resource to guide behavior" (Stone, 2004, p. 25). Though Gardner's conceptualization of the emotional intelligence construct is very similar to current definitions, he did not make specific reference to emotional intelligence itself (Stone, 2004). In the late 1980s, while bringing together various threads of emotional intelligence research that had been explored, it was observed that the human component in the birth of the emotional intelligence construct had been overlooked. In addition, defining the term emotional intelligence clearly and thoughtfully helped demonstrate empirical evidence for the construct (Stone, 2004).

Between 1990 and 1993, concentrated research, noting the emergence of the emotional intelligence construct, was conducted (Stone, 2004). Salovey and Mayer (1990) gathered previous research from intelligence, emotions, artificial intelligence, brain research, and psychology, to develop a formal theory of emotional intelligence (Stone, 2004). The claim for the existence of emotional intelligence as an actual intelligence was published by Mayer and Salovey in 1993. Mayer, DiPaolo, and Salovey used "the first empirical test designed explicitly to measure the concept" in 1990 (Stone, 2004, p. 26).

The emotional intelligence field not only was legitimized, but expanded between 1994 and 1997 (Stone, 2004). Unclear definitions and potential benefits of emotional intelligence spawned during this time, as well as the quantity of tests designed to measure emotional intelligence (Stone, 2004). Emotional intelligence as defined by Mayer and Salovey in 1997, "is the ability to perceive emotions, to access and generate emotions as to assist thought, to understand emotions and emotional knowledge, and to regulate emotions so as to promote emotional and intellectual growth" (p.4) was used in this study.

Since 1998, research on emotional intelligence has expanded (Mayer, 2001). Precision in the development of the emotional intelligence concept in theory and domain has occurred, as well as development of new instruments to measure emotional intelligence has evolved (Stone, 2004). The first peer reviewed research articles on emotional intelligence were published, signaling that this construct has implications for human interactions within the family, the workplace, or the classroom (Stone, 2004).

Gardner developed the term, multiple intelligences in 1993. Gardner's (1993) research concluded that "interpersonal" and "intrapersonal" intelligences are as significant a type of intelligence as intellectual intelligence and related intelligence tests (Cumming, 2005). In 1989, Gardner and Hatch researched the multiple intelligence concept, and found no meaningful relationships with intellectual intelligence tools leading them to "other" intelligences, as defined by Gardner, that were different constructs from intellectual intelligence (Cumming, 2005).

Thorndike and Gardner's theories and research laid the foundations for the present-day authorities in the area of emotional intelligence. Within each of these theoretical philosophies, emotional intelligence is conceptualized from one or two frames of reference: ability or mixed models. The ability model considers emotional intelligence as a pure form of mental ability, and as such, a pure intelligence. Ability models of emotional intelligence "focus on the interplay of emotion and intelligence as traditionally defined," while mixed models "describe a compound conception of intelligence that includes mental abilities, and other dispositions and traits" (Mayer et al., 2000, p. 399). Mixed models combine mental ability with personality characteristics such as optimism and well-being (Stys & Brown, 2004).

At present, Mayer and Salovey (1997) have developed the only ability model. Two mixed models have been developed, each with a different philosophy. While Reuven Bar-On's model was constructed within the context of personality theory accenting the shared dependence of the ability aspects of emotional intelligence with personality traits and their application to well-being, Goleman (1996) contended that a mixed model impacts workplace performance. Further, Goleman's mixed model, with regard to performance, integrates a person's abilities as well as personality and applies the combined effects within workplace performance (Stys & Brown, 2004).

While performance testing requires criteria for rating responses that are more or less intelligent, self-report assessment specifies, in advance, the qualities of emotional intelligence, as written into the questionnaire items, with scoring dependent on the match between self-report and target qualities (Stone, 2004). Roberts et al., (2002) noted major

differences between performance and self-report measures: maximal versus typical performance, noting that performance tests are indicative of maximal attainment while self-report measures assess typical attributes (Stone, 2004).

Self-report measures mandate that individuals have insight into their own level of emotional intelligence (Stone, 2004). With self-report tools, participants can alter their responses by over-estimating their performance and ability. Because performance instruments usually are more time-consuming and more difficult to score, more explicit details by the administrator are required than with self-report measures (Stone, 2004).

Emotional Intelligence Models

There are three main models of emotional intelligence (EI). Mayer and Salovey (1993) reviewed literature and developed a theory of emotional intelligence. The 1990 article by Salovey and Mayer proposed in detail how "a diverse and seemingly unrelated group of studies—in aesthetics, brain research, intelligence measurement, artificial intelligence, and clinical psychology, among others—were all addressing the same phenomenon: a previously overlooked intelligence" (Mayer et al., 2002, p. 5). Within the 1990 article, the apparent discrepant nature of the phrase "emotional intelligence" was discussed "and the first formal definition of the concept and the explanation of skills involved was developed" (Mayer et al., 2002, p. 5). The model by Mayer and Salovey (1990) describes EI as a pure form of intelligence; a cognitive ability. In 1990, Mayer, Salovey, and DiPaolo developed "the first ability scale intentionally developed to measure aspects of emotional intelligence" (Mayer et al., 2002, p 5). Salovey and

Mayer's ability or cognitive theory was updated in 1997, dividing EI into four areas: (a) ability to perceive emotions, (b) ability to use emotions to plan one's actions, (c) understanding others' and one's own emotions, and (d) managing one's own feelings and those of others (Barent, 2005).

Salovey and Mayer (1990) described and defined emotional intelligence "as the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 189). EI is "an ability-based skill for adequate social functioning. EI enables emotionally intelligent individuals to respond quickly and appropriately to their own feelings "because of the accuracy with which they perceive them" (p. 193). In 1997, Mayer and Salovey revised their model of mental ability, with the domains of emotional intelligence being hierarchal and differentiated into four branches: the identification, use, understanding, and management of emotion.

Mixed models, on the other hand, expand upon mental ability models to include a range of non-ability, self-reported characteristics like impulse control, persistence, motivation, flexibility, hope, optimism, and delayed gratification (Roberts et al., 2001). In this case, emotional intelligence is defined as "the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to regulate emotions so as to promote emotional and intellectual growth" (Mayer & Salovey, 1997, p. 4). EI has been associated by Goleman in 1995 with good character or social skills (e.g., empathy, warmth, honesty, good humor, optimism) or motivational drives such as persistence and zeal (Mayer, Salovey, & Caruso, 2002).

A second model by Reuven Bar-On (1997), the Bar-On EQ-I, considers EI as a mixed intelligence, composed of personality factors as well as cognitive ability, and stresses how cognitive and personality factors influence general well-being. Bar-On based EI on personality research for life success (Barent, 2005). Bar-On's model uses self-report measures of emotional intelligence. The EQ-I has 15 variables consisting of a mixture of abilities, personality traits, and dispositions. The 133 item model requires 30 to 45 minutes to complete. Bar-On's model is non-workplace specific. Normative data consist of over 80, 000 American general norms, and 350 Australian norms (Cumming, 2005).

The third model, the Emotional Competency Inventory (ECI) by Daniel Goleman, also recognizes EI as a mixed intelligence composed of cognitive ability and personality aspects. Goleman's model focuses on how personality factors and cognitive ability determine workplace success (Goleman, 1995). Goleman essentially associated emotional intelligence with good social behavior thereby broadening the meaning in the public eye than what had been defined in the scientific literature (Mayer et al., 2002). According to Goleman (1995), EI is defined as a capacity that is learned based on EI that results in stellar performance at work.

Included in Goleman's definition are four emotional and social competencies: (a) self-awareness: knowing one's feelings and using this understanding to make decisions, (b) self-regulation: controlling one's emotions in order to increase the feeling of well-being, (c) empathy: understanding how others are feeling which promotes rapport with differing cultures, and (d) social skills: having the capacity to understand social situations

and to pleasantly interface (Barent, 2005). In 1998, Goleman's model was updated to include five areas: (a) self-awareness (which also included self-confidence), (b) interpersonal skills, (c) adaptability, (d) stress management, and (e) mood (as cited in Barent, 2005). Goleman's model uses self-report measures of emotional intelligence, and uses the Emotional Competency Inventory (ECI), the Emotional Intelligence Appraisal (EIA), and the Work Profile Questionnaire, the Emotional Intelligence Version (WPQei) (Goleman, 2001). The ECI is a 117 itemed questionnaire, requiring 30 minutes to complete. It is work-place specific. No information is publicly accessible on normative data (Cumming, 2005).

There have been several psychological tests attempting to measure conceptions of psychological well-being, health, and positivity (Mayer et al., 2002). While some consider these tests of emotional intelligence, based on the broadened popular definition by Goleman, they do not measure emotional intelligence as defined by Mayer et al., (2002). According to Mayer et al., (2002), measuring emotional intelligence aims at measuring "the capacity to reason about emotions and as the capacity of emotion to enhance thought" (p. 6). The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) "distinguishes itself from other psychological tests in theoretical conceptualizations, in historical lineage, in validity and reliability, as well as in predicting social behaviors" (Mayer et al., 2002, p. 43).

The MSCEIT

Salovey and Mayer's model of EI uses the MSCEIT. The MSCEIT measures performance ability which directs the participant to complete tasks identified with EI (Mayer et al., 2002). The MSCEIT is based on the mental ability model. Normative data for the MSCEIT is based on data collected from diverse geographic areas, with the majority of the data coming from U.S. sites. Other countries, including the United Kingdom, Canada, Malta, South Africa, Australia, Switzerland, Scotland, the Philippines, Slovenia, Sri Lanka, and India, also collected data (Mayer et al., 2002). Favorable reactions from different countries lend support to the international applicability of the MSCEIT (Mayer et al., 2002).

All data collection locations administered the test in English to English speaking respondents (Mayer et al., 2002). Normative data for the MSCEIT is an anthology of data from three samples, with the combined total of these samples creating a normative base of 5000 participants (Mayer et al., 2002). There were large samples of males and females with a higher percentage of females (52.0 %) in the sample (Mayer et al., 2002). Subjects ranged in age from 17 to 79. The majority of the sample was under the age of 30 (62%) (Mayer et al., 2002).

About 70 percent of the sample reported their ethnicity, with large numbers of participants included in four ethnic classifications: White (58.6), Asian (26.4), Black (5.4), and Hispanic (4.9), indicating relatively higher representation of Whites and Asians (Mayer et al., 2002). Several university settings were used for data collection, showing a large percentage of the sample (78.4) having some college/university experience (Mayer

et al., 2002). With the use of the MSCEIT, there is a potential for gender and age imbalance (a higher percentage of females in the sample and a higher percentage of females under age 30), and for culture bias (a higher representation of Whites and a large sample with some college/university experience).

It provides 15 main scores: the Total Emotional Intelligence Quotient (EIQ), two Area scores, four Branch scores, and eight Task scores (Mayer et al., 2002). The total emotional intelligence score provides an overall index of the participant's emotional intelligence (Mayer et al., 2002).

The first Area score includes an Experiential Emotional Intelligence score that presents the participant's ability "to perceive emotional information, to relate it to other sensations such as color and taste, and to use it to facilitate thought" (Mayer et al., 2002, p. 17). A Strategic Emotional Intelligence score is the second Area score. It provides an index of the participant's ability to understand emotional information and how the participant strategically uses this emotional information for planning and self-management (Mayer et al., 2002). Area scores permit "the administrator insight into possible differences between a client's ability to perceive and utilize emotions and the client's ability to understand and manage emotions" (Mayer et al., 2002, p. 18).

The MSCEIT also generates four Branch scores, which provide information on specific emotional abilities (Mayer et al., 2002):

(1) Perceiving Emotions: Skills such as the ability to identify feelings in oneself and others, in art, stories, objects, music, and other stimuli.

(2) Facilitating Thought: Skills such as the ability to use emotions to redirect attention to important events, to generate emotions that expedite decision-making, skillful harnessing of different emotions to encourage creative and sensitive problem-solving.

(3) Understanding Emotions: Ability to understand complex emotions and emotional "chains," how emotions can evolve into another stage, to understand emotional information, and to understand relationships among emotions.

(4) Managing Emotions: Skills of self-awareness in self and in others promoting personal understanding and growth, abilities that lead to determining when an emotion is genuine, and abilities to solve emotion-laded problems without quelling negative emotions.

In the Perceiving Emotions Branch, respondents are asked to identify how a person feels based upon his or her facial expression in the Faces Task (Mayer et al., 2002). Also within this Branch, emotional perception involves determining the emotions that are being expressed in music, art, and the environment around the participant. This aspect of Perceiving Emotions is measured by a task in which the participant "indicates the extent to which certain images or landscapes express various emotions" in the Pictures Task (Mayer et al., 2002, p. 20).

The Sensations Task in the Facilitating Thought Branch, "measures a task in which the participant was asked to compare different emotions to different sensations, such as light, color, and temperature" (Mayer et al., 2002, p. 20). The Facilitation Task, also within the Facilitating Thought Branch, notes that different moods assist certain

kinds of cognitive activity. The Facilitation Task "measures the participant's knowledge of how moods interact and support thinking and reasoning" (Mayer et al., 2002, p. 20).

Within the Understanding Emotions Branch, "the Blends Task assesses the participant's ability to analyze blends of emotions into their parts and, conversely, to assemble simple emotions together into complex feelings" (Mayer et al., 2002, p. 20). The Changes Task, also within the Understanding Emotions Branch, "measures the test-taker's knowledge of emotional 'chains,' or how emotions transition from one to another (e.g., how anger can change into rage)" (Mayer et al., 2002, p. 20).

The Emotion Management Task, within the Managing Emotions Branch, measures the participant's "ability to incorporate his or her own emotions into decision making. This task asks the participant "to rate the effectiveness of alternative actions in achieving a certain result in situations where a person must regulate his or her own emotions" (Mayer et al., 2002, p. 20). Also within the Managing Emotions Branch, the Emotional Relations Task measures the participant's ability to incorporate emotions into decision making that involves other people. In achieving an outcome involving other people, respondents were asked to "evaluate how effective different actions would be" (Mayer et al., 2002, p. 20).

Some of the advantages of the ability-based conception include: clarity of definition, participant difficulty of faking the ability, and operationalizing of the concept of EI (Mayer et al., 2002). Importantly, according to Mayer, Salovey, and Caruso (2002), "the ability based model provides unique contributions to prediction" (p. 8) and so the mental model was chosen for use in this study.

Post-baccalaureate trends

There is little information written about evening adult masters' level classroom environment. In order to help understand the adult learner, trends in adult undergraduate programs are reviewed. Changes in demographic, institutional, economic and technological trends produced growing diversity in the undergraduate student population in American postsecondary education (Pascarella & Terenzini, 1998). For example, major shifts from student homogeneity to heterogeneity and the increased importance of the role of community colleges in the national system of postsecondary education have led to these shifting trends (Pascarella & Terenzini, 1998). Darkenwald and Novak (1997) suggested that in undergraduate degree programs, the growing number of adults over 25 constituted one of the most profound changes in American higher education.

In a triangulated study comparing adult college students' perceptions of effective teaching with those of traditional students, findings confirmed that individual student differences based on gender and age make a difference in the judgment of importance of certain teacher characteristics (Donaldson, Flannery, & Ross-Garden, 1993). Implications from this study suggested that teachers in higher education cannot expect to teach adult students the same way they have taught traditional students (Donaldson et al., 1993). These changes in student homogeneity have brought about shifts in homogeneity in the educational process (Pascarella & Terenzini, 1998). Lecturing had been the method of choice for teaching students. Educational settings (e.g., a campus, classroom, or laboratory), and the academic delivery cycle (the academic calendar, the number and

length of class sessions, the number of credits needed for program or degree completion) reflect past beliefs and practices for effective instructional methods (Pascarella & Terenzini, 1998).

For example, the instructional cohort in educational administration programs has become a popular delivery format (Scribner & Donaldson, 2001). Research findings showed that group climate, norms, roles, and communications can enhance or impede learning (Scribner & Donaldson, 2001). Cohorts provide positive affective benefits and positive emotional climate (Scribner & Donaldson, 2001).When studying the nature of instructional cohorts and learning issues about the level and types of instructional intervention needed as part of facilitating student learning, Donaldson and Scribner (2003) stated that learning occurs from performance and critical reflection on and about the structure of performance. These findings suggested "that facilitation must be coupled with interventions that help students critically reflect on limits to their learning" (Donaldson & Scribner, 2003, p. 660).

Donaldson and Townsend (2007), in studying higher education journals' discourse about adult undergraduate students, stated that adults are comfortable with self-directed learning and took issue with sexists and ageist stereotypes. The shifts in student homogeneity and educational process homogeneity have also led to changes in the homogeneity in the level of public support (Pascarella & Terenzini, 1998). Economic pressures and demands for accountability for determining who will "pay" for higher education reflects the public's dwindling willingness to provide unquestioning financial support (Pascarella & Terenzini, 1998).

The Connecting Classroom and Classroom Environment

Historically, most adult learning research emphasized the role of the learner, with the teacher-facilitator role experiencing subordinate attention (Brockett & Darkenwald, 1987). The importance of the facilitator in the process of adult learning has been stressed, thus the teaching learning experience and practice needs more research. Previous research in adult learning has concluded "that classroom social climate exerts potent effects on such student outcomes as achievement, attendance, and satisfaction" (Brockett & Darkenwald, 1987, p. 32).

"Classroom social climate is the outgrowth of student and teacher background characteristics and their interpersonal behaviors" (Beer & Darkenwald, 1989, p. 33). While research has shown that a positive classroom environment is supportive of adult learner satisfaction and learning (Darkenwald, 1987; 1989; Graham, 1998; Donaldson & Graham, 1999; Donaldson, Graham, Martindill, & Bradley, 2000), creating a positive classroom environment for the adult learner is a necessary skill for the sensitive instructor. In addition to the classroom environment, other conditions that "affect learning include subject matter, students' prior knowledge, experience, and ability; institutional constraints; support services; and facilities" (Darkenwald, 1989, p. 67).

The Model of College Outcomes developed by Donaldson and Graham (1999) draws attention to the importance that the classroom plays for the learning of adult students. Adult learners tend not to be involved on campus; rather their form of involvement on the campus is in the classroom (Donaldson & Graham, 1999). It is an

open model, and considers how outside collegiate environment might affect student outcomes (Donaldson, 2003).

The Model of College Outcomes acknowledges that "while learning may be individual, it often occurs as adults participate in communities-of-learning and communities-of-practice" (Donaldson, 2003, p. 8). Donaldson and Graham's (1999) model consists of six components: (a) Prior Experience and Personal Biographies, (b) Psycho-social and Value Orientations, (c) Adult Cognition, (d) The Connecting Classroom , (e) Life-World Environment, and (f) College Outcomes. The Connecting Classroom is at the center of this model (Donaldson, 2003). According to Donaldson, the connecting classroom is

> the central venue for social engagement on campus and for negotiating meaning for learning. This is the model's central component. It can vary from supportive to non-supportive depending upon a range of factors, including instructor attitudes about adult students, faculty sensitivity to cultural and educational differences of minority students (Ross-Gordon& Haywood-Brown, 2000), and the extent to which instructional strategies help adults connect their in-class and off-campus learning and knowledge structures (p. 9).

For the purposes of this study, the class room is the unit of analysis.

The connecting classroom includes the following four elements: (a) ethos of an adult-oriented environment, (b) learning of expertise, (c) nature of the teaching learning process, and (d) living in a multicultural learning society (Donaldson & Graham, 1999),

all of which are suggestive of Darkenwald's (1989) conception of the adult classroom environment that is conducive to adult learning.

The classroom portrays a crucial function in shaping learning and college outcomes for adults (Donaldson, 2003). For most adult students, the classroom experience represents their primary connection to the college campus (Donaldson, 2003). The classroom is the adult learners "birthing" and "creating" space, where new meanings are made that allow connection with what they have learned with what they have experienced in their world (Donaldson, 2003). "The classroom also serves as a social place, a setting where adult students develop relationships with faculty members and fellow learners, not so much for social reasons, but more for the purposes of establishing relationships that support and enhance their learning" (Donaldson, 2003, p. 7). Through the classroom, adult students connect and interact with many diverse cultures (Donaldson, 2003).

Moos in 1979 defined the concept of social environment or climate as the "personality of a classroom or other social group" (Darkenwald, 1987, p. 67). Moos further emphasized that "the social-ecological setting in which students function can affect their attitudes and moods, their behavior and performance, their self-concept and general sense of well- being" (Moos, 1979, p. 3). The topic of classroom climate for the adult classroom as it relates to teacher behavior or style was first examined by Darkenwald in 1989. Classroom climate is "created by the characteristics and interactions of students and teacher" (Darkenwald, 1989, p. 7). According to Darkenwald (1989), teaching style and the classroom social environment interact. Effective teaching occurs

when the teacher takes the necessary steps to see that they and their adult students create optimal conditions for learning (Darkenwald, 1989).

The Adult Classroom Environment Scale

The Adult Classroom Environment Scale (ACES) was created to assess adult classroom climates (Darkenwald, 1989). It is the only scale developed to" measure the social environment of adult education classrooms in general" (Langenbach & Aagaard, 1990, p. 95). Moos' 1979 classroom environment theory was used in the development of the ACES where the dimensions could be classified into his three proposed domains: (a) relationship, (b) personal development, and (c) system maintenance and change (Langenbach & Aagaard, 1990).

Darkenwald and Valentine's (1986) ACES development was an attempt to obtain a valid instrument for use in classroom environment research with adult learners. The ACES conceptualizes the classroom environment as a "dynamic social system" that includes teacher behavior, teacher-student interaction, and also student-student interaction (Darkenwald, 1989). Two forms of the ACES were produced: Real and Ideal. The "Real" form refers to student perceptions of the "real" or actual classroom environment as students experience it. The ideal form, in contrast, assesses how participants characterize their preferred classroom environment. The ACES is self-administered and consists of forty-nine items, seven items for each of the seven dimensions. Both forms contain identical items, but different directions. Either form can

be administered to both teachers and students (Darkenwald, 1989). The Real form of the ACES was used in this study.

The ACES measures "seven empirically derived dimensions that describe a growth-enhancing adult learning environment" (Beer & Darkenwald, 1989, p. 36). The ACES contains 49 items, comprised of seven 7-item subscales in a four-choice format ranging from strongly agree to strongly disagree (Beer & Darkenwald, 1989). The following seven dimensions are included in the ACES: (a) affiliation (student interaction and cohesion); (b) teacher support (teacher sensitivity and support); (c) task orientation (focus and accomplishments); (d) personal goal attainment (relevance and flexibility); (e) organization and clarity (simply organization and clarity); (f) student influence (collaborative planning and teacher nonauthoritarianism); and (g) involvement (student attentiveness, participation, and satisfaction) (Langenbach & Aagaard, 1990).

Cronbach's alpha was computed for each subscale, "with subscale reliabilities ranging from barely satisfactory (.58) to very high (.89)" (Darkenwald & Valentine, 1986, p. 78). Total scale reliabilities were uniformly high (Darkenwald & Valentine, 1986). With respect to discriminate validity, intercorrelations among the seven subscales generally were low to moderate, implying that they do not measure the same thing (Darkenwald & Valentine, 1986). "The range of the intercorrelations was -.20 to .55, with the mean 37 (Darkenwald & Valentine 1986, p. 78). With regard to concurrent validity, items 50 and 51, 'I enjoy this class' and 'I am learning a lot from this class' were included in the instrument exclusively as validity checks resulting in "the following correlations between scale scores and the 'satisfaction/success' index (items 50 and 51

combined). These correlations support this proposition and provide additional evidence of validity: Involvement, .71; Affiliation, .49; Teacher Support, .74; Task orientation, .51; Personal Goal Attainment, .60; Organization and Clarity, .68; Student Influence, .74; Total Scale, .77 (all coefficients significant beyond .001 levels)" (Darkenwald & Valentine, 1986, p. 79).

Relationship between EI and the ACES

The learning environment must be seen through a broader framework than just the physical classroom lens (Hiemstra & Sisco, 1990). Instructors must be aware that the learning environment "includes social, cultural, and psychological elements as well as the physical features" (Hiemstra & Sisco, 1990, p. 245). Darkenwald and Valentine (1986) developed the Adult Classroom Environment Scale (ACES) used to measure the social environment of adult education classrooms. The concept of EI validates the discussion of emotions in the schools and the workplace because emotions reflect crucial information about relationships (Cobb & Mayer, 2000).

The Connecting Classroom component of Donaldson and Graham's Model of College Outcomes for Adults (1999) "addresses the ways that adults use the classroom and their interactions with students and faculty as a springboard for their learning" (p. 30). In addition, "the social aspects of instruction (i.e., development of a community of learners within classes and having a respectful and caring instructor) are critical factors for adult students" (Donaldson & Graham, 1999, p. 30). Adult students' overall fulfillment with "the college's academic climate (e.g., faculty concern for students,

faculty accessibility, quality of instruction) played a more significant role in the students' learning outcomes than did their involvement, suggesting the centrality of the classroom in these adult students' experiences" (Donaldson & Graham, 1999, p. 31). A seminal rule of effective teaching style is that the teacher initiates the necessary actions "to see that the teacher and their adult students are mutually obligated to create optimal conditions for learning" (Darkenwald, 1989, p. 68).

Therefore, good instructors should continuously "craft" their teaching environment and knowledge, by constantly testing, adjusting, and reframing their models of practice based on experience, reflection, and assessment (http://www.newhorizons.org/lifelong/higher_ed/marchese.htm). Analysis of students' perception of the classroom environment from the ACES compared with instructor's emotional intelligence ability as noted from the MSCEIT, could provide the instructor with further impetus for "crafting" the classroom environment.

While extensive research on adult learners has emphasized the importance of the learner's active role (Miglietti & Strange, 1998), the facilitator/instructor role has received subordinate emphasis in research (Brockett & Darkenwald, 1987). Research conducted by Miglietti and Strange (1998) examined the dynamics of teaching and learning among underprepared (students 25 years and older needing help with remedial math and English in a two-year branch of a large four-year regional Midwestern institution) found that "a learner-centered approach and activities, personalizing instruction, relating course materials to students experiences, assessing student needs, climate building, participation in the learning process, and maintaining flexibility for

personal development" (p. 6) related significantly to adult learners' feelings of accomplishment and positive total experience.

Findings from this study showed that learner-centered classes were related to higher grades, a greater sense of accomplishment, and greater overall satisfaction among underprepared (Miglietti & Strange, 1998). These findings suggest that instructors can improve the outcomes of their efforts by regularly assessing and implementing the above dimensions of their teaching style (Miglietti & Strange, 1998).

Summary

This review of literature discussed the emotional intelligence construct and the adult learner classroom environment via Donaldson and Graham's (1999) connecting classroom idea. The literature reviewed presented the development of the emotional intelligence construct. From reviewing the literature, definitions of emotion, emotional intelligence, emotional intelligence models, measures of emotional intelligence, as well as defining adult classroom climate, post-baccalaureate trends, and the connecting classroom idea, the potential relationship between EI and the ACES, and the adult classroom environment scale (ACES) were presented. Criticisms of the MSCEIT and the ACES were reviewed.

Chapter Three provides a description of the research design, including the measurement instruments and data collection procedures used. Chapter Four presents the data analysis and research findings. Chapter Five presents the study summary results and implications for future research.

CHAPTER THREE

Study Design

This chapter details the methodology used in the study of instructor's emotional intelligence and adult students' perceptions of the real classroom environment within two colleges and universities at the master's level. In addition, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), the Adult Classroom Environment Scale (ACES), sample population, research design, and statistical methods used are discussed.

Description of the Design

This research was correlation in design, using Pearson *r* to explore the relationship between instructor emotional intelligence and the connecting classroom in two Midwestern, nontraditional, evening adult master's level college programs. The correlation design was appropriate for this study because little is known about the relationship between the instructor's emotional intelligence and students' perceptions of classroom climate. This quantitative research design enabled determination of instructor's emotional intelligence using the MSCEIT, and adult student's perception of classroom environment, using the ACES. The correlation study design was relevant for exploring the relationships and subscale relationships between two or more variables. The unit of analysis in this study was each adult master's level evening class.

This research was also exploratory in that it attempted to garner insight into the emotional intelligence construct from a connecting classroom perspective. The researcher

undertook to explain the magnitude of the relationship between an instructor's emotional intelligence and the adult student's perception of classroom environment.

The Mayer-Salovey-Caruso-Emotional Intelligence Test (MSCEIT) was administered to those classroom instructors in the evening adult master's programs in two universities and colleges. The MSCEIT measures abilities of how well people perform tasks and solve emotional problems, rather than asking for their subjective assessment of their emotional skills. The "responses to the MSCEIT represent actual abilities to solve emotional problems," (Caruso, Mayer, & Salovey, 2002, p. 1), and scores are relatively unaffected by such confounds as self-concept, response set, and emotional state (Caruso et al., 2002). The Adult Classroom Environment Scale (ACES) was administered to assess students' perceptions of actual classroom climate (Darkenwald, 1989) in two universities and college programs.

Correlational analysis was used to examine the relationship between instructor's emotional intelligence scores on the MSCEIT, and the actual ACES student perception scores. Correlational analysis was also conducted to examine the relationships between instructor's emotional intelligence and program type (cohort based or other), student age, course content (e.g., business, criminal justice, and education), class size, and student's gender (majority gender in class). Data analyses of the instructors' MSCEIT TEI score, along with the ACES Total score and ACES subscale scores were conducted using the Statistical Package for the Social Sciences (versions 15, 16 and 18.). Partial correlation was conducted to explore the influence of covariates on the strength of correlations between the two major variables.

Missing Data

It is important to include adequate number of sample sizes in the study because the number of sample size affects (1) statistical power, (2) the statistical significance in the test, and (3) the magnitude of the effect of interest in the population. One instructor did not complete a section in the MSCEIT and the missing value scores for TEI and the Use Emotion dimension were calculated using the expectation-maximization (EM) approach instead of using the list wise deletion method (Dempster, Laird, & Rubin, 1977). Other missing data in the MSCEIT and in the ACES surveys were also calculated using the EM approach. In the list wise deletion method for handling missing data, an entire observation is excluded from analysis if any single value is missing, thus reducing data and statistical power (http://en.wikipedia.org/wiki/Expectation-maximization_algorithm, p. 1, retrieved 3.15.2011). According to Borman's internet tutorial (retrieved 3.15.2011), "the EM algorithm is an efficient iterative procedure to compute the Maximum Likelihood (ML) estimate in the presence of missing or hidden data (p. 5)." He further states that the EM algorithm "has become a popular tool in statistical estimation problems involving incomplete data" (p. 1). EM is an iterative method that alternates between performing an expectation (E) step, which computes the expectation of the log-likelihood evaluated using the current estimate for the latent variables, and a maximization (M) step. The M step computes parameters maximizing the expected log likelihood found on the E step (Dempster et al., 1977). The EM algorithm is

an approach in which values of the statistics which could be computed if a complete dataset were available are estimated taking into account the pattern of missing data.

Population

This correlational study examined the population of nontraditional evening graduate adult master's level students in Education, Business Administration, and Criminal Justice at two higher education institutions. The researcher made initial telephone calls to the Directors of Adult and Graduate Programs in a Midwestern town, explaining the purpose and focus of the study (see Appendix A), and seeking instructor and student participation in this research study. Once participation was affirmed, a follow up letter was mailed, reiterating the research purpose and focus, as well as samples of the MSCEIT and ACES instruments. With the IRB approval, and after verbal and written consent was obtained (see Appendix B and C for consent forms), the MSCEIT, with a stamped-addressed envelope, was distributed to participating instructors for completion (MSCEIT completion time requires 30-45 minutes).

After verbal and written consent to participate in this study was obtained, the ACES were administered in class to the adult evening master's program participants. Participant confidentiality was assured by assigning a letter to each institution followed by a number for each class. The coding, MSCEIT scores and ACES scores were kept in a locked filing cabinet.

The researcher standardized the administration of the MSCEIT to the instructor by providing a printed instruction guideline sheet along with the copy of the MSCEIT

and a stamped self-addressed envelope. The researcher standardized the procedure for administering the "real" ACES to participating students in the evening adult master's level programs by reading verbatim the guidelines for administering the ACES. After the researcher received the completed MSCEIT from the instructors, the completed tests were sent to Multi-Health Systems in Toronto, Ontario, for scoring.

The ACES data were tabulated and analyzed in SPSS using descriptive statistics that detailed the scores of subscale branches and by correlational analysis to explore the association between EI branches and ACES subscale scores.

Mayer-Salovey-Caruso Emotional Intelligence Test

The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) was chosen to measure the EI independent variable. The MSCEIT is "an ability-based scale: that is, it measures how well people perform tasks and solve emotional problems, rather than simply asking them, for example, about their subjective assessment of their emotional skills"(Mayer et al., 2002, p. 1). It was developed from an intelligence testing tradition that was heavily informed by rising scientific realization and recognition of the role of emotions and their functions (Mayer et al., 2002). The MSCEIT evolved from the Multifactor Emotional Intelligence Scale (MEIS), and is based directly on the MEIS. The MEIS was the first published ability measurement tool specifically designed to measure emotional intelligence (Mayer, DiPaolo, & Salovey, 1990. The advantage of ability measure, according to Mayer, Salovey, and Caruso (2002), is that "ability measures have the advantage of representing an individual's performance level on a task. Self-report

measures, are filtered through a person's self-concept and impression management motives" (p. 4).

The MSCEIT V2.0 is a 141-item ability measurement tool. The focus of the MSCEIT is on the capacity to identify, use, understand, and manage emotions (Mayer et al., 2002). The MSCEIT test takers are asked to solve a series of emotional problems arranged in eight clusters, labeled "A" to "H." The questions involve identifying emotions in faces and pictures, and comparing emotional feelings to other sensations such as color, heat, and many others (Mayer et al., 2002). Personal demographics of age and gender, necessary for scoring the test, were asked.

The MSCEIT can be scored by either general consensus or expert scoring. Both methods furnish similar results, with the general consensus scoring recommended for most applications (Mayer et al., 2002). The MSCEIT was normed on 5,000 respondents from 50 research sites around the world. The majority of the normative sample was white females under 30 years of age (Mayer et al., 2002). Stability estimates of the MSCEIT, in the form of test-retest reliability after three weeks, were reported as $r = .86$ (Bracket & Mayer, 2001). Internal consistency, in the form of split half reliability, ranges from $r = .80$ to .91 for the four branches and $r = .91$ for the entire test. Inter-rater reliabilities are not reported as all response sheets are processed and scored by the test publisher (Mayer et al., 2002). "The reliability of scores at the Total, Area, and Branch levels range from good to excellent" (p. 43).

The MSCEIT can be used in a multitude of situations and settings, including clinical, research, educational, corporate, correctional, and preventive settings (Mayer et

al., 2002). The content validity is reported as being good, with two subtasks of the MSCEIT being devoted to measuring each of the four branches of the emotional intelligence model (Mayer et al., 2002). The standardization sample was used to assess the internal consistency of the MSCEIT scales. "The MSCEIT has a full scale reliability of .91, with area reliabilities of .90 (experiential) and .85 (strategic)" (Mayer et al., 2002, p. 35). After controlling for personality and IQ, the MSCEIT was able to predict social deviance in a sample of 207 college students, thus demonstrating predictive validity (Bracket & Mayer, 2003).

The MSCEIT provides 15 main scores: Total Emotional Intelligence (EIQ) score, two Area scores, four Branch scores, and eight Task scores. Each score can be determined according to a general consensus method. In the general consensus method, each one of a participant's answers is scored against the proportion of the sample that endorsed the same MSCEIT answer. If a participant, for example, recorded that surprise was "definitely present" in a face, and the same alternative was chosen by 45% of the sample, that participant's score would be increased by the proportion, .45. The participant's total raw score is the sum of those proportions across the 141 items of the test. Table 1 illustrates the levels of scoring and tasks associated with each from the MSCEIT.

Table 1

Overview of MSCEIT Scores

Type of Score	Hierarchy of Specific Scores			
Area Scores	Experiential EIQ		Strategic EIQ	
Branch Scores	Perceiving EIQ	Facilitating EIQ	Understanding EIQ	Managing EIQ
Task Scores	Faces Pictures	Sensations Facilitation	Blends Changes	Management Relations

Taken from the MSCEIT User's Manual, 2002, p. 14.

According to the MSCEIT User's Manual (Mayer et al., 2002):

> The MSCEIT produces an overall Total EIQ score, two Area EIQ scores, four Branch EIQ scores, and eight Task scores. There are three supplemental scores: a Scatter score, a Positive-Negative Bias score, and an omission rate...The central feedback from the MSCEIT involves the overall score, the two Area scores, and particularly, the Branch EIQ scores…The Total Emotional Intelligence Quotient (EIQ) measures overall emotional intelligence. The next two scores represent broad areas of skill in emotional intelligence. The Experiential Emotional Intelligence Quotient (EEIQ) describes the degree to which one "takes in" emotional experience, recognizes it, compares it to other sensations, and understands how it interacts with thought. The Strategic Emotional Intelligence Quotient (SEIQ) indicates the degree to which one can understand emotional meanings, their implications for relationships, and how to manage emotions in oneself and others (p. 14).

The four emotional intelligence quotients are related to the individual branches of emotional intelligence from the Four Branch Model. Table 1 offers the following scores: Branch 1, the Perceiving Emotions EIQ indicates a participant's ability to identify emotions; Branch 2, the Facilitating Thought EIQ indicates the use of emotions to aid and foster ideas; Branch 3, the Understanding Emotions EIQ indicates one's knowledge about emotions; and Branch 4, the Managing Emotions EIQ indicates the capacity for emotional regulation (Mayer et al., 2002)

The eight individual Task scores provide information about specific task performance. As Task scores tend to be less reliable measures of emotional intelligence and subject to greater variation, these scores require careful attention when interpreting (Mayer et al., 2002).

According to the MSCEIT User's Manual (Mayer et al., 2002):

> The Scatter score indicates the overall degree to which a respondent's emotional intelligence is at a fairly consistent level, or whether it varies markedly from area to area. The Positive-Negative Bias score assesses the degree to which the respondent perceives positive emotions (e.g., happiness) as opposed to negative emotions (e.g., sadness) in the pictorial stimuli on the MSCEIT. Omission rate is the percentage of items that the respondent has left blank…Specifically, if fewer than half the items on a given task are completed, that Task score will not be computed. If a Task score cannot be computed. The MSCEIT Total score will not be computed, and the Area and Branch scores that include that task will also not be computed (p. 15).

The Expert scoring method is the other way to score the MSCEIT. Here each of the participant's scores is evaluated against the criterion composed by the proportional responding of an expert group (Mayer, Salovey, Caruso, & Sitarenios, 2003).

According to the MSCEIT User's Manual (Mayer et al., 2002):

> MSCEIT scores are computed as empirical percentiles, and then positioned on a normal curve with an average score of 100 and a standard deviation of 15. If a respondent obtains a MSCEIT score of 100, they are in the average range of emotional intelligence. A respondent obtaining a score of 115 is about one standard deviation above the means, or at the 84th percentile. If a respondent obtains an overall MSCEIT score of 85, they are about one standard deviation below the mean, or, at the 16th percentile (p. 18).

The Total Emotional Intelligence Score provides an overall index of the participant's emotional intelligence (Mayer et al., 2002). Table 2 indicates the range of scores obtained by the MSCEIT and their qualitative descriptors. In this study, instructors who obtained a Total EIQ score of 115 or better, which is about one standard deviation above the mean, or at the 84th percentile, were regarded as those with high emotional intelligence. Instructors with a Total EIQ score of 90-109 were considered to have average emotional intelligence.

Table 2

Guidelines for Interpreting MSCEIT Scores and Categories for This Study

Total EIQ Score Range	Qualitative Range	Categories for this Study
69 or less	Consider Development	very low
70-89	Consider Improvement	low
90-99	Low Average Score	average
100-109	High average score	average
110-119	Competent	high
120-129	Strength	high
130+	Significant Strength	very high

Note: From MSCEIT User's Manual (2002), Multi-Health Systems, Inc., 2002, p. 18.

The Total Emotional Intelligence (EIQ) score provides an overall index of the participant's emotional intelligence. The Total EIQ is a summary of the participant's performance on the MSCEIT. The Total EIQ score compares an individual's performance on the MSCEIT to those in the normative sample (5,000 participants).

There are two Area scores: (a) an Experiential Emotional Intelligence (EEIQ) score, and, (b) a Strategic Emotional Intelligence (SEIQ) score. The area score facilitates insight into possible differences between the participant's ability to perceive and utilize emotions and her/his ability to understand and manage emotions. The two Area scores measure the participant's ability to acquire and manipulate emotional information (Mayer et al., 2002). The EEIQ score yields an index of the participant's ability to perceive

emotional information, relating it to other sensations such as taste and color, and then using this information to facilitate thought. It assesses the participant's "ability to perceive, respond, and manipulate emotional information without necessarily understanding it" (Mayer et al., 2002, p. 18). It indicates how "accurately a respondent can 'read' and express emotion, and how well that respondent can compare that emotional information to other sorts of sensory experiences (e.g., colors, or sounds)" (p. 18). The SEIQ score offers an index of the participant's ability to understand emotional information and use it strategically for self-management and planning (Mayer et al., 2002). It evaluates a participant's "ability to understand and manage emotions without necessarily perceiving feelings well or fully experiencing them" (p. 18). It tabulates how accurately a participant "understands what emotions signify (e.g., that sadness typically assesses a loss) and how emotions in oneself and others can be managed" (p. 18).

The Branch scores offer information about the participant's specific emotional abilities (Mayer et al., 2002). The MSCEIT provides four Branch scores: Perceiving Emotions, Facilitating Thought, Understanding Emotions, and Managing Emotions. Each Branch score is reported as emotional intelligence quotients (EIQs). Each Branch score is made up of two individual tasks: Experiential Emotional Intelligence (EEIQ) score, and the Strategic Emotional Intelligence (SEIQ) score. The EIQ scores on the MSCEIT were "calculated according to the criterion of *what most people say* (the general consensus) and/or according to the criterion of what *experts say* (the expert consensus)" (Mayer et al., 2002, p. 8).

For the purpose of this study, the Total Emotional Intelligence quotient (TEI) Score and the four Branch scores were used. The TEI score compares an individual's performance on the MSCEIT to the normative sample. For the research question, the TEI score were used. Although the MSCEIT is scored in three ways (expert, consensus, normative), the normative score was used in the present research.

The Perceiving Emotions Branch of the MSCEIT

The Perceiving Emotions Branch of the MSCEIT involves the ability "to perceive and to express feelings; the ability to pay attention and to accurately decode emotional signals in facial expressions, tone of voice, and artistic expressions (Mayer et al., 2002, p. 19). "The MSCEIT measures the appraisal of emotions in others and in images. The Faces and Pictures tasks of the MSCEIT can be expected to serve as a proxy for one's ability to accurately perceive one's own emotions as well" (p. 19). Perceiving Emotions is measured with the Faces and Pictures tasks (Mayer, Salovey, Caruso, & Sitarenious, 2003).

The Facilitating Thought Branch of the MSCEIT

The Facilitating Thought Branch score indicates how much a participant's thoughts and other cognitive activities are informed by her/his experience of emotions. Having the ability to use one's emotions may assist in creative problem solving (Mayer et al., 2002). The Sensations and Facilitation task scores are included in this Branch. The Facilitating Thought Branch scores focuses on how emotions affect the cognitive system,

allowing for better reasoning, more effective problem-solving and decision-making, and ultimately, creative solutions. Emotions change the way people think. Positive thoughts are created when a person is happy and negative thoughts are created when a person is sad. These types of emotional changes can facilitate new and creative thoughts and solutions (Mayer et al., 2002). Facilitating Thought is measured with the Sensations and Facilitation tasks (Mayer, Salovey, Caruso, & Sitarenios, 2003).

The Understanding Emotions Branch of the MSCEIT

The Understanding Emotions Branch score reflects the ability to label emotions and to recognize that there are groups of related emotional terms (Mayer et al., 2002). This Branch includes the ability to label emotions; recognizing that there are groups of related emotional terms. Blends and Changes are the task scores involved in this Branch. Understanding what leads to various emotions is a critical component to understanding emotional intelligence. Annoyance and irritation, for example, can lead to rage if the cause of the irritation continues and intensifies. Knowledge of how emotions combine and change over time is "important in dealing with other people and in enhancing one's self-understanding" (Mayer et al., 2002, p. 19).

The Managing Emotions Branch of the MSCEIT

The Managing Emotions is the fourth branch in the MSCEIT. Emotional management and Emotional Relations task scores are within this Branch. Managing emotions, according to Mayer et al., (2002), means that," at appropriate times, one feels

the feeling rather than repressing it, and then uses the feeling to make better decisions" (p. 19). Success in managing emotions frequently includes the "awareness, acceptance, and use of emotions in problem solving" (p. 19). Emotional regulation involves the participation of emotions in thought, and allows thought to include emotion; not to repress or rationalize emotions (Mayer et al., 2002). Managing Emotions is measured with Emotion Management and Emotional Relationship tasks (Mayer, Salovey, Caruso, & Sitarenious, 2003).

Adult Classroom Environment Scale

The Adult Classroom Environment Scale (ACES) measures adult learning environments (Darkenwald, 1989). The ACES, according to Langenbach and Aagaard (1990), is the only scale developed to measure the social environment of adult education classrooms. Darkenwald and Valentine's (1986) ACES development was an attempt to obtain a valid instrument for use in classroom environment research with adult learners. It was an effort designed to measure teacher and student expectations in the adult classroom environment (Darkenwald & Valentine, 1986). Interviews with adult students and educators, reviews of other environmental scales, and brainstorming resulted in generating 159 usable items relevant to adult classroom environments. This list was then reduced to 89 items that were classified into seven dimensions. The 89 items were then administered to 220 subjects, and item-analysis and respondent feedback were used to reduce the items to 49.

The seven dimensions, according to Darkenwald and Valentine (1986), as cited by Langenbach and Aagaard (1990), included:

a. Affiliation, defined as student interaction and cohesion;
b. Teacher support, defined as sensitivity and encouragement;
c. Task orientation, defined as focus and accomplishments
d. Personal Goal Attainment, defined as relevance and flexibility;
e. Organization and Clarity, defined simply as classroom organization and clarity;
g. Student Influence, defined as collaborative planning and teacher nonauthoritarianism; and
h. Involvement, defined as student attentiveness, participation, and satisfaction (p. 96).

The above seven dimensions of the Adult Classroom Environment Scale were not entirely supported by factor analyses conducted by Langenbach and Aagaard (1990). Although evaluation of the factor structure of the instrument is mixed, the factor structure described by Darkenwald and Valentine was used which is the structure used by most researchers who have used the instrument (G. G. Darkenwald, personal communication, March 29, 2007). Table 3 notes the reliability coefficients for Scales and Subscales.

Table 3

Reliability Coefficients for ACES Subscales

Form	N	Involv	Aff	TeaSp	Task Orient	PerGoal Attain	Organ& Clarity	Influe	TOTAL
S-Real	355	.80	.73	.85	.68	.76	.84	.73	.94
S-IDEAL	375	.80	.70	.74	.66	.66	.83	.71	.93
T-REAL	46	.67	.72	.74	.58	.69	.83	.89	.90

Taken from Darkenwald & Valentine, 1986, p.78
Legend: S = Student Real Version of ACES; S = Student Ideal Version of ACES; T = Teacher Real Version of ACES.

The ACES conceptualizes the classroom environment "as a dynamic social system that includes not only teacher behavior and teacher-student interaction but also student-student interactions" (Darkenwald, 1989, p. 69). Darkenwald's (1989) ACES instrument measures seven empirically based dimensions that characterize a positive or growth-enhancing adult learning environment.

The ACES is self-administered and consists of forty-nine items, seven items for each of the seven dimensions (see Appendix B). Depending on the purpose of the research, total and subscale scores can be computed. The Real form refers to the perceptions of the "real" or enacted environment. The Ideal form, in contrast, assesses how participants characterize their preferred classroom environment. The two forms contain identical items but different directions, and either form can be administered to both students and teachers (Darkenwald, 1989). The Real form of the ACES was used in this study.

Procedures

The researcher made phone calls to the Directors of Adult and Graduate studies master's level programs at two higher education institutions, explaining the purpose and focus of the study, and seeking their adult master's level program students' participation. The researcher telephoned the directors of research at two colleges and universities, requesting permission to invite their instructors and students in the adult evening masters' programs to participate in the study.

The two directors of research agreed via telephone conversation to have their instructors and students participate (see Appendix A for the telephone script). Once participation was confirmed, a follow up letter was e-mailed detailing again the purpose and focus of the study, as well as introducing the MSCEIT and the Real version form of the ACES. After verbal and written informed consent was obtained, the researcher mailed each instructor participant a printed copy of the instructions required to complete the MSCEIT and a copy of the MSCEIT, with a stamped self-addressed envelope to be returned to the researcher. Eleven instructors completed and returned the MSCEIT by mail to the researcher out of class time. The instructors not returning the MSCEIT were contacted by phone within seven days. The completed tests were sent by the researcher via insured mail for scoring to Multi-Health Systems in Toronto, Ontario.

Each instructor's class (as the unit of analysis) students completed the Real form of the ACES, in class time administered by the researcher. The researcher presented a synopsis of the focus and purpose of the study at each adult evening master's level class

in the two higher education institutions. After verbal and written informed consent was obtained, the researcher read written guidelines verbatim for completing the Real form of the ACES. Data were obtained through administering the Real version of the ACES during class time (completion of the ACES requires 15-20 minutes of class time). Participant student confidentiality was assured by assigning an identification letter and number, depending on the institution. Data from the completed Real form of the ACES were entered into SPSS.

Data Analysis Design

The data from the MSCEIT and the ACES were tabulated and analyzed using descriptive statistics, and Pearson *r*, to determine if factors of adult instructor emotional intelligence and student's perception of adult classroom environment were related. Descriptive statistics (mean, standard deviation, variance, range, minimum, and maximum) were used to describe responses to the MSCEIT and ACES. Correlation analysis was conducted to explore relationships between the and instructor TEI (Total Emotional Intelligence) score, the seven ACES subscales, program type, student age mix, course content, class size, and student's gender. Pearson *r* was used to determine the extent of the relationship, if any, between the instructors' EI (Emotional Intelligence) as measured by the MSCEIT and students' perceived classroom environment as measured by the real version of the ACES. Since there were a smaller number of participants, the Pearson *r* offered a more reliable estimate of correlation (Fraenkel & Wallen, 2000).

The results of the instructor participant's MSCEIT TEI (Total Emotional Intelligence) scores were analyzed. The MSCEIT Total EI score provided a summary of the instructor participant's performance on the test and compared that individual participant to those in the normative sample. The normative sample for the MSCEIT demonstrates data compiled from 5000 participants from multi-geographical sites; the United States being the primary site. This score was then further broken down into two Area scores, four Branch scores, and eight task scores.

The correlational statistical process, Pearson Product Moment Correlation, or Pearson *r*, was used to answer the research question: What extent, if any, is the relationship between the EI of classroom instructors measured by the MSCEIT and perceived classroom environment as measured by the overall score on the Real Version of the ACES? Descriptive statistics were used to answer this question, where EI and the classroom environment were described.

Major analysis of the research question was done using Pearson product-moment correlational analysis. The seven ACES subscale scores and the Total ACES scores were correlated with the MSCEIT Total Emotional Intelligence (TEI) score. Analysis of the data collected from the instructors' MSCEIT TEI and their four MSCEIT dimension scores, as well as demographic information pertaining to age and gender, and the adult evening students' ACES subscale scores provided the backdrop for this study. Results from the ACES data as well as other variables indicated immediately above, with the class as the unit of analysis, was compared to that instructor's MSCEIT scores to explore the relationship, if any, between instructor TEI and the seven ACES subscales.

Summary

According to Mayer and Salovey (1997), an emotionally intelligent person has the ability to perceive emotions in the self and in others, is capable of using emotions to facilitate thought, understands emotional information, and manages emotions in the self and in others. Instructors with these abilities should be able to foster a supportive classroom climate for adult learners. The MSCEIT and the ACES were selected to provide information about instructor-adult classroom environment relationships that would be useful to instructors who are currently teaching, those in instructor preparation programs, and those in the field of adult higher education.

The research contributes to the understanding of emotional intelligence and how varying levels of emotional intelligence might influence teacher behavior towards students in the adult classroom environment. Chapter Three offered a description of the methods and procedures used in this research, including the instruments and sampling procedures. Chapter Four presents findings, including an analysis of findings for the research question.

CHAPTER FOUR

Results

The central focus of this research project was to explore if there was a relationship between instructor Emotional Intelligence (EI) and adult evening masters students' perception of classroom climate. This study was designed to explore the relationships, if any, between the seven ACES subscales and the instructor's total emotional intelligence. The associations between an instructor's total emotional intelligence and the five following variables of program type, student age mix, course content, class size, and student gender were also explored. With the increase of adult students on college campuses in masters' level evening programs, instructors and administrators increasingly need to respond sensitively to a diverse, blended population of students. The scope and quality of instructor/adult student classroom climate may be influenced by the instructor's emotional intelligence.

The Mayor-Salovey-Caruso Emotional Intelligence Test (MSCEIT) was used to collect data from eleven adult evening masters' instructors in this research project. Data were also collected from those eleven instructors' 167 adult evening masters' students who completed the Adult Classroom Environment Scale (ACES). This chapter examines the data collected through the instructors' completion and scoring of the MSCEIT and through students' completion of the seven ACES subscales. After a brief overview of the study, including a review of the research question, results for the research question are presented.

Data Analysis

The following question was explored in this study: What is the relationship between evening adult students' perception of classroom climate as measured by the ACES and instructors' Emotional Intelligence (EI) as measured by the MSCEIT?

The ACES data set contained negative items. These items were reversed scored before further analysis. Those items included: 4, 5, 6, 10, 12, 15, 16, 18, 25, 28, 30, 38, 39, 42, and 49. Negatively coded items ranged 1 to 4. When those negatively coded items were reversed, 1 became 4, 2 became 3, 3 became 2, and 4 became 1.

Once negative items were reversed, descriptive statistics for categorical and continuous variables were first analyzed. Later, major analysis of the research question was done using Pearson product-moment correlation analysis. The seven ACES subscales were correlated with the MSCEIT Total Emotional Intelligence score (TEI). Review of the data collected from the instructors' MSCEIT Total EI and their four dimension scores, as well as demographic information pertaining to age and gender, and the adult evening students' ACES subscale scores provided the backdrop for this study. Data analyses of the instructors' MSCEIT Total EI score, along with the ACES subscales scores were conducted using the Statistical Package for the Social Sciences (SPSS) (versions 15 and 18.0).

For missing data treatment, version 15 of SPSS was used because that version of SPSS has the built-in Expectation-Maximization (EM) method. This was done because other later versions of SPSS do not provide EM method as a default in the program.

Participant Description

Instructor Demographics

Instructors of adult students in evening masters' level programs at two institutions of higher learning in a Midwestern city were invited to participate in this research project. Eleven different instructors participated and provided data. After obtaining informed written consent, those instructors completed the MSCEIT questionnaire. The completed MSCEIT Response form was then mailed by the researcher to Multi-Health Systems (MHS) for scoring. Two of those eleven instructors participated twice and their MSCEIT Total EI data were used twice with different student data. One of those eleven instructors participated three times and those MSCEIT Total EI data were used three times with different student data.

Course titles taught by the instructors included: Human Development, International Business, Decision Science for Business, Legal and Ethical Issues in Criminal Justice, Methods of Teaching Mild/Moderate Cross-Categorical Students, Marketing Strategy, Evaluation of Individual Achievement and Aptitude, Financial Business Decisions, Fundamentals of Educational Administration, Entrepreneurship, Development, Gender and Cultural Differences, Applied Case Projects, and Information Systems for Management. Class size ranged from four to 19. Instructors' Total Emotional Intelligence (EI) scores ranged from 77 to 117 (*one instructor did not complete a section in the MSCEIT and the missing value scores for TEI and the Use dimension were calculated using the expectation-maximization (EM) approach instead of using the list wise deletion method which would have reduced the amount of data by deleting empty

observations with any missing data (Dempster et al., 1977). Missing data reduce the representativeness of the sample and can distort inferences about the population. Values for individual missing data-items were estimated using the full information maximum likelihood estimation method of taking full account of all information available. Total EI for that instructor was then scored. The distribution of the MSCEIT scores for the population of eleven instructor participants varied with age and gender (see Table 1). Three female instructors, aged 38, 54, and 61 completed the MSCEIT. Eight male instructors, ranging in age from 45 to 64 years of age also responded to the instrument. Instructor demographics are portrayed in Table 4.

Table 4

Instructor Demographics

Instructor	Content	ProgType	Age	Class size	Gender
1	Education	Noncoho	38	9	Female
		Noncoho		14	Female
		Noncoho		16	Female
2	Business	Noncoho	61	6	Female
3	Business	Noncoho	57	16	Male
4	CrimJust.	Noncoho	53	8	Male
5	Education	Noncoho	45	10	Male
		Noncoho		11	Male
6	Business	Cohort	54	5	Female
7	Business	Cohort	50	19	Male
8	Education	Cohort	64	12	Male
9	Business	Cohort	61	4	Male
10	Business	Cohort	61	19	Male
		Cohort		14	Male
11	Business	Cohort	61	5	Male

Instructors' MSCEIT Results

The MSCEIT is designed to measure an individual's overall emotional intelligence, including the abilities to perceive emotion, use emotions to facilitate thinking and problem solving, understand emotions, and manage emotions. The Total Emotional Intelligence (EI) score provides an overall index of the participant's emotional intelligence. If persons obtain a score of 69 or less, they would be in the very low category, and should consider further development of their emotional intelligence. A score between 70 and 89 is in the low category, and further development should also be considered. A score of 90 to 99 would put the instructor participant in the low average category. Scores of 100 to 109 would place the instructor in the high average category. An instructor's score of 110 to 119 is in the competency category. A score of 120 to 129 would place the instructor in a strength category (Mayer et al., 2002). The range of MSCEIT scores and descriptions of the categories of MSCEIT scores for this study are listed in Table 5.

Table 5

Guidelines for interpreting MSCEIT scores and categories for this study

Total EI score range	Qualitative range	Categories for this study
69 or less	Consider development	Very low
70 – 89	Consider development	Low
90 – 99	Low average score	Average
100 -109	High average score	Average
110 – 119	Competence	High
120 – 129	Strength	High

Note: From MSCEIT User's Manual, Multi-Health Systems, Inc., 2002b, p. 18.

TEI score and four MSCEIT dimensions

The Total EI score provides a summary score which compares the individual's MSCEIT score with that of the normative sample of 5000 respondents and measures a participant's ability to think clearly about emotions, and to perceive, use, understand and manage emotions. The four dimensions of EI include: (1) the ability to perceive emotions in oneself and others as well as in art, music, literature and other stimuli; (2) the ability to use emotions to facilitate thought, generate, use and feel emotion to communicate feelings, or use them in other cognitive processes; (3) the ability to understand emotions and emotional information, and how emotions combine and progress through relationship transitions, thus appreciating such emotional meanings; and (4) the ability to manage emotions, to be open to feelings, to modulate those feelings in oneself and others so that personal understanding and growth is promoted and enhanced (Mayer et al., 2002).

In examining the instructors' Total EI scores in this research project, one female education instructor scored in the high average category (108 Total EI score), one female business instructor had an average Total EI score (96), and one female business instructor

had a Total EI score of 77 or low category. One male business instructor had a high or competent score of 117, and two male business instructors scored in the high average category with Total EI scores of 109 and 104, respectively. Four male instructors scored in the low average category—a business instructor and a criminal justice instructor had scores of 99, a male education instructor did not complete a section of the MSCEIT and his TEI of 98 was estimated using the full information Expectation Maximization (EM) method for missing values, while a male education instructor had a Total EI low average score of 94. One male business instructor had a low Total EI score of 79.

Instructor dimension scores for Perceive Emotion dimension ranged from 74 to 118. The Instructor Use Emotion dimension scores ranged from 71 to 121. The Understand Emotion dimension instructor scores ranged from 85 to 122. The Manage Emotion dimension scores for instructors ranged from 85 to 112.

In examining the instructors' Total EI scores in this research project, there were no strength competency scores (120-129), nor significant strength scores (130+) as noted in Table 2 guidelines. Given the distribution of the instructors, 14.3% had low scores less than 89, 35. 7% had average scores ranging from 90-99%, 35.6% had high average scores ranging from 100-109, and 14.3% had competent scores ranging from 110-117. Instructors' mean scores, as well as range and standard deviation, in each of the four MSCEIT dimensions are presented in Table 6.

Table 6

Instructors' Descriptive Statistics of four MSCEIT Dimensions

Dimension	Number	Range	Minimum	Maximum	Mean	Standard Deviation
Perceive Emotion	11	44	74	118	98.87	13.62
Use Emotion	11	50	71	121	97.33	13.32
Understand Emotion	11	37	85	122	103.60	10.31
Manage Emotion	11	27	85	112	99.60	8.96

Student Demographics

The 167 participating adult students were enrolled in adult evening master's degree programs in two higher education institutions in a Midwestern town. They were enrolled in Master's programs in Education, Criminal Justice, and Business Administration. Their educational backgrounds included having a baccalaureate degree and enrollment in an adult evening master's program as soon as two months and as many as twenty-nine years after completing their baccalaureate degree. Although not all students reported in what subjects they had their baccalaureate degrees, those who did report this information had baccalaureate degrees in accounting, agricultural education, agricultural journalism, business, business agriculture, American studies, anthropology, art, athletic training, biology, business administration, chemistry, communication, computer science, criminal justice, education, elementary education, English, film, finance, forensics, general studies, genetics, history, journalism, interdisciplinary studies, interior design, marketing, mass media, mathematics, parks and recreation, physical

education, political science, psychology, social studies, sociology, and special education. One student had a master's degree in molecular science.

Of the 167 students, 110 (65.9%) were female, and 57 (34.1%) were male. The students ranged in age from 22 to 60 (five of the 167 student participants did not note birthdates). There were ten non-cohort program type classes in business administration, criminal justice, and education. Cohort structures were used to organize students in four of the business and in one of the education programs. In the present study five classes came from the cohort group (see Table 7). Fifty-five of the 167 students were enrolled in a cohort evening masters' program.

Table 7

Instructor, Content, and Program Type Summary

Instructor	Content	Program Type
#1	Education	Non-cohort (Taught 3 separate classes)
#2	Business	Non-cohort
#3	Business	Non-cohort
#4	Criminal Justice	Non-cohort
#5	Education	Non-cohort (Taught 2 separate classes)
#6	Business	Non-cohort
#7	Business	Non-cohort
#8	Education	Cohort
#9	Business	Cohort
#10	Business	Cohort (Taught 2 separate classes)
#11	Business	Cohort

Students' ACES scores

Basic descriptive statistics for student responses to the seven ACES subscales are detailed in Table 8. There it is noted that the Organization and Clarity subscale had the

highest mean (*M*= 3.12) while the Student Influence had the lowest mean and the smallest standard deviation (*M*=2.42, *SD* = 0.26). Computed reliability data indicated that the ACES had an overall internal consistency of 0.82 (Cronbach's alpha) as compared to the 0.90 measure obtained by Langenbach and Aagaard for the ACES in their 1990 study. Basic descriptive statistics for the participating adult evening masters' students for each of the seven ACES subscales can be seen in Table 8.

Descriptive statistics of the ACES and the seven subscales (Affiliation, Teacher Support, Task Orientation, Personal Goal Attainment, Organization and Clarity, Student Influence, and Involvement) for each of the eleven instructors (two instructors taught two different classes and one instructor taught three different classes for a total of 15 classes) are noted in Table 9.

Table 8

Student Descriptive Statistics for the seven ACES subscales

ACES subscale	N	Mean	Standard Deviation
Affiliation	167	3.05	.30
Teacher Orientation	167	3.09	.39
Task Orientation	167	2.67	.45
Personal Goal Attainment	167	2.86	.43
Organization and Clarity	167	3.12	.36
Student Influence	167	2.42	.26
Involvement	167	3.0	.39

Descriptive statistics of the total ACES results and its subscales (Affiliation, Teacher Support, Task Orientation, Personal Goal Attainment, Organization and Clarity, Student Influence, and Involvement) for each of the eleven instructors (two instructors taught two different classes and one instructor taught three different classes for a total of 15 classes) and the seven ACES subscales (Affiliation, Teacher Support, Task Orientation, Personal Goal Attainment, Organization and Clarity, Student Influence, and Involvement) are noted in Table 9.

Table 9

Descriptive statistics for each instructor by ACES subscales

Instructor	Subscale	N	Mean	S.D.
1 – 3	Affiliation	39	3.11	.04
	Teacher Support		3.24	.05
	Task Orientation		2.62	.04
	Personal Goal Attainment		3.12	.06
	Organization & Clarity		3.29	.04
	Student Influence		2.48	.04
	Involvement		3.20	.06
4	Affiliation	6	2.98	.10
	Teacher Support		3.07	.12
	Task Orientation		2.57	.09
	Personal Goal Attainment		2.50	.12
	Organization & Clarity		3.19	.08
	Student Influence		2.17	.08
	Involvement		3.07	.08
5	Affiliation	15	2.67	.08
	Teacher Support		3.17	.12
	Task Orientation		2.77	.07
	Personal Goal Attainment		2.83	.10
	Organization & Clarity		3.19	.07
	Student Influence		2.31	.06
	Involvement		2.92	.09
6	Affiliation	8	3.05	.14
	Teacher Support		2.95	.10
	Task Orientation		2.70	.06
	Personal Goal Attainment		2.70	.10
	Organization & Clarity		3.18	.07
	Student Influence		2.45	.10
	Involvement		2.70	.06
7 -8	Affiliation	21	3.05	.06
	Teacher Support		3.33	.05
	Task Orientation		2.78	.05
	Personal Goal Attainment		3.19	.06
	Organization & Clarity		3.20	.10
	Student Influence		2.60	.05
	Involvement		3.16	.10
9	Affiliation	5	3.00	.08
	Teacher Support		2.94	.06
	Task Orientation		3.46	.89
	Personal Goal Attainment		2.63	.13

Instructor	Subscale	N	Mean	S.D.
	Organization & Clarity		2.66	.17
	Student Influence		2.09	.15
	Involvement		2.71	.17
10	Affiliation	19	3.36	.05
	Teacher Support		2.99	.14
	Task Orientation		2.38	.11
	Personal Goal Attainment		2.67	.11
	Organization & Clarity		2.80	.13
	Student Influence		2.48	.06
	Involvement		2.76	.10
11	Affiliation	12	2.96	.04
	Teacher Support		3.05	.07
	Task Orientation		2.56	.05
	Personal Goal Attainment		3.00	.04
	Organization & Clarity		3.11	.06
	Student Influence		2.55	.06
	Involvement		2.92	.09
12	Affiliation	4	3.32	.21
	Teacher Support		3.25	.19
	Task Orientation		2.71	.12
	Personal Goal Attainment		3.11	.16
	Organization & Clarity		3.00	.13
	Student Influence		2.75	.14
	Involvement		3.04	.22
13 – 14	Affiliation	33	2.98	.05
	Teacher Support		2.88	.06
	Task Orientation		2.70	.06
	Personal Goal Attainment		2.54	.07
	Organization & Clarity		3.05	.06
	Student Influence		2.28	.04
	Involvement		2.81	.06
15	Affiliation	5	3.00	.11
	Teacher Support		3.00	.04
	Task Orientation		2.66	.03
	Personal Goal Attainment		2.63	.07
	Organization & Clarity		3.17	.10
	Student Influence		2.25	.12
	Involvement		3.12	.14

The class sizes ranged from 4 to 19 students. Instructor 1-3, a female education instructor, had the largest number of students (39) in her total number of classes, while

instructor 12 had only 4 students – the smallest class size. Instructor 1-3 had the higher scores across the seven ACES subscales compared to other instructors. Instructor 1-3 had the highest score of Involvement (M = 3.20) and Organization and Clarity (M = 3.29) across all instructors. Instructor 10 had relatively lower scores on all the seven ACES subscales, more specifically, the lowest score on Task Orientation (2.38). A male business instructor had the highest TEI score (117), with a sample size of 33 students in his combined two classes, and also had the lowest Teacher Support score (2.88). In general, the smaller number of students in the classroom, the higher the Affiliation and Teacher Support mean scores. The mean scores of the ACES Organization and Clarity for nine instructors were clustered around 3.0. On the other hand, two instructors, 9 and 10, had Organization and Clarity scores below 3.0

Instructors' Total EI scores and students' ACES subscale scores

For each individual instructor's class, the student scores for each of the seven ACES subscales Affiliation, Teacher Support, Task Orientation, Personnel Goal Attainment, Organization and Clarity, Student Influence, Involvement were calculated. The correlation of these scores with the instructors' total EI score and scores for each of the four MSCEIT dimensions (Perceive, Use, Understand, and Manage emotion) were computed using the SPSS program (version 18). See Table 10.

The relationship between TEI scores and other program variables was also explored: Program Type (cohort or non-cohort), Student Gender, and Students' Age, Content, and Classroom size. Table 10 presents the results of this correlation analyses.

Instructors' correlation analysis for TEI and ACE subscales

Analysis of Pearson product moment correlations between instructors' Total Emotional Intelligence (TEI) and the seven ACES subscales was conducted. Five out of the seven ACES subscales revealed no statistically significant relationships between TEI at $a = 0.05$, Teacher Support ($r = .05$, $p = .54$), Task Orientation ($r = .02$, $p = .78$), Personal Goal Attainment ($r = .03$, $p = .69$), Student Influence ($r = .10$, $p = .20$), and Involvement ($r = .09$, $p = .25$). A statistically significant negative relationship was found between instructor TEI and the ACES Affiliation subscale ($r = .19*$, $p = .01$).

In addition, a statistically significant positive relationship was found between TEI and the Organization and Clarity subscale ($r = .25**$, $p = .00$). This means that the instructor who had a higher TEI came to class with activities that students thought well designed, well planned, and well prepared. Instructor TEI and ACES subscale correlations are shown in Table 11.

Table 10 Correlation: Instructor's Total EI, four MSCEIT dimensions, seven ACES subscales and variables

	TEI	D1	D2	D3	D4	A1	A2	A3	A4	A5	A6	A7	PT	SG	AG	CL	CO
TEI	1	.971**	.874**	.554**	.526**	-.194*	-.048	.022	-.031	.253**	-.101	.090	.127	-.011	-.023	.100	-.049
		.000	.000	.000	.000	.012	.536	.780	.688	.001	.195	.248	.103	.886	.774	.201	.526
D1	.971**	1	.805**	.538**	.360**	-.164*	-.037	.007	-.038	.258**	-.135	.101	.095	-.014	.008	.146	.049
	.000		.000	.000	.000	.034	.633.	.926	.622	.001	.082	.193	.222	.855	.922	.059	.526
D2	.874**	.805**	1	.326**	.599**	-.202**	-.007	-.018	.011	.251**	.007	.085	.109	.029	-.095	.013	-.028
	.000	.000		.000	.000	.009	.928	.822	.891	.001	.931	.273	.161	.70.8	.230	.863	.724
D3	.554**	.538**	.326**	1	.082	.018	.004	-.045	.117	.143	.083	.093	.197*	-.098	.155*	-.014	-342
	.000	.000	.000		.292	.814	.963	.565	.131	.066	.289	.233	.011	.207	.049	.855	.000
D4	.526**	.360**	.599**	.082	1	-.372**	-.145	.086	-.137	.103	-.129	-.074	.117	.048	-.132	-.021	.089
	.000	.000	.000	.292		.000	.062	.269	.078	.186	.098	.343	.132	.541	.093	.790	.253
A1	-.194*	-.164*	-.202**	.018	-.372**	1	.214**	-.108	.185*	.046	.215**	.225**	.074	-.139	-.009	.121	-.058
	.012	.034	.009	.814	.000		.006	.165	.017	.551	.005	.003	.342	.073	.912	.119	.456
A2	-.048	-.037	-.007	.004	-.145	.214**	1	.319**	.584**	.636**	.279**	.559**	-.185	-.127	.009	-.066	-.272**
	.536	.633	.928	.963	.062	.006		.000	000	.000	.000	.000	.017	.104	.908	.400	.000
A3	.022	.007	-.018	-.045	.86	-.108	.319**	1	.161*	.278**	.024**	.187*	-.011	-.031	-.033	-.174*	.017
	.780	.926	.822	.565	.269	.165	.000		.038	.000	.000	.015	.888	.692	.675	.025	.832
A4	-.031	-.038	.011	.117	-.137	.185*	.584**	.161*	1	.459**	.538**	.538**	-.184	-.090	-.013	-.093	-.494**
	.688	.622	.891	.131	.078	.017	.000	.038		.000	.000	.000	.017	.249	.867	.232	.000
A5	.253**	.258**	.251**	.143	.103	.046	.636**	.278**	.459**	1	.151	.641**	-.202**	-.127	.033	-.045	-.310**
	.001	.001	.001	.066	.186	.551	.000	.000	.000		.052	.000	.009	.103	.680	.561	.000
A6	-.101	-.135	.007	.143	.103	.215**	.279**	.024	.538**	.151	1	.239**	-.181*	-.041	-.014	-.024	-.343**
	.195	.082	.931	.066	.186	.005	.000	.000	.000	.052		.002	.020	.598	.863	.760	.000
A7	.090	.101	.085	.093	-.074	.225	.559**	.187*	.538**	.641**	.239**	1	-.294**	-.098	.159*	-.145	-.348**
	.248	.193	.273	.233	.343	.003	.000	.015	.000	.000	.002		.000	.208	.044	.061	.000
PT	.127	.095	.109	.197*	117	.074	-.185*	-.011	-.184*	.202**	-181*	-.294**	1	.032	.023	.263**	.319**
	.103	.222	.161	.011	.132	.342	.017	.888	.017	.000	.020	.000		.686	.768	.001	.000
SG	-.011	-.014	.029	-.098	.048	-.139	-.127	-.031	-.090	-.127	-.041	-098	.032	1	.063	.087	.286**
	.886	.855	.708	.207	.541	.073	.104	.692	.249	.103	.598	.208	.686		.429	.265	.000
AG	-.023	.008	-.095	.155*	-.132	-.009	.009	-.033	-.013	.033	-.014	.159*	.023	.063	1	.037	-.078
	.774	.922	.230	.049	.093	912	908	.675	.867	.680	.863	.044	.768	.429		.638	.323
CL	.100	.146	.013	-.014	-.021	.121	-.066	-.174*	-.093	-.045	-.024	-.145	.263**	.087	.037	1	.255**
	.201	.059	.863	.855	.790	.119	.400	.025	.232	.561	.760	.061	.001	.265	.638		.001
CO	-.049	-.049	-.028	-.342**	.089	-.058	-.272**	.017	-.494**	-.310**	-.343**	-.348**	.319**	.286**	-.078	.255**.	1
	.526	.526	.724	.000	.253	.456	.000	.832	.000	.000	.000	.000	.000	.000	.323	001	

* Correlation is significant at the 0.05 level (2-tailed). **Correlation is significant at the 0.01 level (2-tailecd). Legend: TEI = Total Emotional Intelligence, D1=Perceive Emotion, D2=Use Emotion, D3=Understand Emotion, D4=Manage Emotion, A1=Affiliation, A2=Teacher Support, A3=Task Orientation, A4=Personal Goal Attainment, A5=Organization & Clarity, A6=Student Influence, A7=Involvement, PT=Program Type, SG=Student Gender, AG=Student Age, CL=Classroom size, CO=Co

Table 11

Correlation analysis for Instructor TEI and seven ACES subscales

	Aff	TeaSup	TaskOri	PesGoalAtt	OrgClar	StuInf	Involvem
TEI r	-.19*	-.05	.02	-.03	.25**	-.10	.09
P	.01	.54	.78	.69	.00	.20	.25

* Correlation is significant at the 0.01 level (1-tailed).
** Correlation is significant at the 0.05 level (2-tailed).

Statistically significant relationships between the four MSCEIT dimensions and the seven ACES subscales were then considered. See Table 11 for details. The correlation, *r*, yielded a test statistic following a *t*-distribution with *N*-2 degrees of freedom.

Correlational analysis revealed statistically significant negative relationships between the instructor TEI and the Affiliation ACES subscale (r = -.19, p = .01). Further, a statistically significant positive relationship was found between instructor TEI and the ACES subscale Organization and Clarity subscale (r = .25**, p = .00). No statistically significant relationships were found between the MSCEIT dimensions of Perceive Emotion, Use Emotion, and Manage Emotion and the variables of program type, student gender, student age, class size, and content.

Further, Teacher Support, Task Orientation, Personal Goal Attainment, Student Influence, and Involvement had no statistically significant relationships with the four MSCEIT dimensions (Perceive, Use, Understand, and Manage emotion). Statistical relationships of Organization and Clarity were investigated with Program Type and Content covariates. However, the ACES subscale Organization and Clarity revealed statistically significant negative relationships with Program Type (r = .20**, p = .01) and

Content (r = .31**, p = .00).

Relationships between instructors' TEI and the ACES subscale Organization and Clarity subscale might be affected by covariates Program Type and Content because Program Type and Content had statistically significant relationships with Organization and Clarity (r = -31**, p = .00). Thus, the two covariates, Program Type and Content were included in follow-up partial correlation analyses to explore which of the variables (or which combination) might be most strongly related to TEI and the ACES subscales.

Partial Correlations

Table 12 notes the partial correlation output for relationships between the TEI and the ACES Organization and Clarity subscale while controlling for Program Type and Content. Organization and Clarity describes the students' perception of how well planned and organized the instructor has designed classroom activities. Results reveal that including Program Type and Content covariates in the analysis affects the degree of correlation. Partial correlations between Organization and Clarity and TEI were slightly increased when including Program Type and Content in the analysis compared to correlation without those covariates (see Table 12). For instance, the correlation between Organization and Clarity and TEI was .25 (p =.00) when the covariates Program Type and Content were not considered in the analysis. However, after accounting for Program Type in the analysis, the partial correlation between Organization and Clarity and TEI was increased to r = .31.

Table 12

Partial Correlations

		Bivariate Correlation	Partial Correlation		
		OR&C	Controlling variables		
			ProgramTy	Content	ProgramTy &Content
TEI	R	.25**	.29**	.30**	.31**
	P	.00	.00	.00	.00
	Df	167	164	164	163
	Variance explained	6.40%	8.23%	9.12%	9.42%

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (1-tailed).

When calculating Pearson correlations, the entire *N* size was used in calculation. In calculating partial correlations degrees of freedom, *N-K-P* formula was used, with *N* being total number of sample size participants (167), *K* being correlations, i.e., TEI and Organization and Clarity, and *P* is the number of controlling variables: if either Program Type or Content is considered in the model, *P* becomes 1 but *P* becomes 2 when Program Type, coded 0 for non-cohort and 1 for cohort group, and Content, coded 0 for education or criminal justice and 1 for business, are included in the model at the same time. There were 96 (59.6%) students in the non-cohort Program Type and 65 (40.4%) in the cohort Program Type. There were 90 (55.6%) students in the education and criminal justice non-cohort program type, and 72 (44.4%) in the cohort program type. The business non-cohort program type had 80 (49.4%) students and 82 (50.6) students in the cohort program type. Education and Criminal Justice content and the non-cohort program type contributed to higher correlations between TEI and Organization and Clarity. Perhaps the

higher association among the education and criminal justice students was due to the individual instructors or a function of the class content. Instructors in the business content may have been emotionally intelligent, but students were less likely to see organization and clarity in their classes.

After obtaining the correlations between TEI and Organization and Clarity with or without covariates, the total variance explained was calculated. However, there were different percentages of variations (see Table 12). When controlling for Content, the proportion of variance explained increased slightly. We can infer that the relationship between TEI and Organization and Clarity with or without confounding variables such as Program Type and Content when partialling out Program Type and Content one at a time suggested that Content was the confounding variable.

Summary of Results

This study explored what is the relationship, if any, between adult evening masters' level students' perception of classroom climate as measured by the ACES and classroom instructors' Emotional Intelligence as measured by the MSCEIT. The association between aspects of classroom environment and instructor's total emotional intelligence, program type, student age mix, course content, class size, and student gender were also explored.

Correlational analysis was the major method of analysis used to answer the research question. The instructors' Total EI (Emotional Intelligence), the four MSCEIT dimensions, and the following variables: Program Type, Student Gender, Student Age, Content, and Class Size were correlated with the seven ACES subscales. One variable

that relates to another variable does not mean that changes in one caused changes in the other. Other variables may be acting on one or both of the related variables and affect them in the same direction. “Cause-and-effect may be present, but correlation does not prove cause” (Yates, Moore, & Starnes, 2002, p.238). Correlational analyses revealed a statistically significant negative relationship between instructor’s TEI and the Affiliation ACES subscale (r = -.19**, p = .00). A statistically significant positive relationship was also found between instructor’s TEI and the Organization and Clarity ACES subscale (r = .25**, p = .00).

Partial correlations between Organization and Clarity and TEI showed an increase when including Program Type and Content in the analysis compared to correlation without those covariates. The correlation between Organization and Clarity and TEI was .25 (p = .00) when the covariates Program Type and Content were not considered in the analysis. However, after accounting for Program Type and Content in the analysis, the partial correlation between Organization and Clarity and TEI was increased to r = .31.

When controlling for Content, the proportion of variance explained increased slightly. It can be inferred that the relationship between TEI and Organization and Clarity with or without confounding variables such as Program Type and Content when partialling out Program Type and Content one at a time suggested that Content was the confounding variable.

In chapter five, discussion and implications are presented along with the limitations and design challenges. Conclusions about the research are discussed and recommendations for future practice and research are also presented.

CHAPTER FIVE

Summary, Conclusions, and Recommendations

This chapter begins with a brief review of the research problem and the research design used. This study explored the relationships between the seven ACES subscales and the instructors' emotional intelligence. Further, the following variables were explored in terms of their relation to classroom climate: program type, student age mix, course content, class size, and student sex. Finally, this chapter addresses limitations, discussion and conclusions, as well as recommendations for educational practice and for future research.

Overview of the Study

The need to integrate new technologies into the workplace, demographic changes, as well as economic changes leading to career changes has raised the importance of post baccalaureate education (Kohl & LaPidus, 2000). With the increase of adult students on college campuses in master's level evening programs, instructors and administrators need to be able to respond effectively to this population of students. The scope and quality of instructor/adult student classroom climate may be influenced by the instructor's emotional intelligence.

While most research for the past three decades has explored the adult undergraduate population (Darkenwald, 1987, 1989; Brockett & Darkenwald, 1987; Donaldson & Graham, 1999, 2000; Graham et al., 2000), little research exists about adult evening master's degree programming. Many of the studies on adult undergraduates over

the last 30 years have focused on adult students' perceptions of classroom climate. The results of adult undergraduate survey responses were that not only was a positive classroom environment conducive to learning, but also "to the developing of a community of learners within classes" (Donaldson & Graham, 1999, p. 30). Meeting the instructional needs of a changing, complex, and diverse adult student population is a central task for the adult educator in an evening adult master's program. The classroom psychological and emotional climate is of immense importance to the adult learner in order to assist learners to make meaning and to foster learning (Graham et al., 2000).

The Model of College Outcomes offered by Donaldson & Graham (1999, p. 25) draws attention to the importance that the classroom plays for the learning of adult undergraduate students. Since adult students tend not to be involved in campus activities; rather their form of involvement on the campus is in the classroom (Donaldson & Graham, 1999). This model takes into consideration how adult students "compensate for…their different academic backgrounds and their busy adult lifestyles" (Donaldson & Graham, 1999, p. 26). With the graying of America, and the resulting changes in baby-boomer demographics and socioeconomic status, reacculturation into new career choices through adult education venues demands that the adult classroom bridge those pre-existing conditions, life-world experiences, and learning in context so that "new meanings" are made. Donaldson and Graham (1999) captured this function of the classroom by labeling it the "connecting classroom" for adult learners. The connecting classroom is made up of several different ingredients, one of which is a positive learning climate and environment.

Design and Procedures

This study explored the relationships between the seven ACES subscales and the instructor's total emotional intelligence. The central focus of this research project explored the relationships, if any, between instructor emotional intelligence (EI) and adult evening masters' students' perception of classroom environment. The association between instructors' TEI and the following variables: program type, student age mix, course content, class size, and student gender was also explored.

Major analysis of the research question was done using correlational analysis. The ACES seven subscales were correlated with the MSCEIT Total Emotional Intelligence score (TEI). The Pearson product moment correlation (PPMC) statistical process was used to determine if instructor's emotional intelligence and the seven ACES subscales were related. In addition, the PPMC process was used to determine if Program Type (cohort or non-cohort), Student Age (21 to 60 years of age), Class room Size, or Content variables were associated with instructor's TEI or the seven ACES subscales.

Multiple methods of survey data collection were used in this study. Data for this study were gathered from instructors in two institutions' evening masters' level programs of higher learning in a Midwestern town. The eleven participating instructors completed the MSCEIT to collect data on emotional intelligence. One hundred sixty seven adult evening masters' students from those eleven instructors' classes completed the ACES questionnaire. The data were entered by the researcher into SPSS for analysis.

The MSCEIT V2.0 is a 141-item ability measurement tool. The focus of the MSCEIT is on the capacity to identify, use, understand, and manage emotions (Mayer et al., 2002). The MSCEIT test takers are asked to solve a series of emotional problems

arranged in eight clusters, labeled "A" to "H." The questions involve identifying emotions in faces and pictures, and comparing emotional feelings to other sensations such as color, heat, and many others (Mayer et al., 2002). Personal demographics of age and gender, necessary for scoring the test, were also collected. The completed MSCEIT Response Form was then returned to the researcher and mailed to Multi Health Systems for scoring. Participant identification was assigned according to institution and master's degree program.

The MSCEIT Total EI score provides a summary score which compares the individual's score with that of the normative sample of 5000 respondents and measures a participant's ability to think clearly about emotions, and to perceive, use, understand and manage emotions. The four dimensions of EI include: (a) the ability to perceive emotions in oneself and others as well as in art, music, literature and other stimuli; (b) the ability to use emotions to facilitate thought, generate, use and feel emotion to communicate feelings, or use them in other cognitive processes; (c) the ability to understand emotions and emotional information, and how emotions combine and progress through relationship transitions, thus appreciating such emotional meanings; and (d) the ability to manage emotions, to be open to feelings, to modulate those feelings in oneself and others so that personal understanding and growth is promoted and enhanced (Mayer et al., 2002).

The ACES measures "seven empirically derived dimensions that describe a growth-enhancing adult learning environment" (Beer & Darkenwald, 1989, p. 36). The ACES contains 49 items, comprised of seven 7-item subscales in a four-choice format ranging from strongly agree to strongly disagree (Beer & Darkenwald, 1989). The following seven dimensions are included in the ACES: (a) affiliation (student interaction

and cohesion); (b) teacher support (teacher sensitivity and support); (c) task orientation (focus and accomplishments); (d) personal goal attainment (relevance and flexibility); (e) organization and clarity (simply organization and clarity); (f) student influence (collaborative planning and teacher nonauthoritarianism; and (g) involvement (student attentiveness, participation, and satisfaction (Langenbach & Aagaard, 1990).

Summary of Results

The research question explored the relationship between instructors' Emotional Intelligence (EI) as measured by the MSCEIT and evening adult students' perceptions of classroom climate as measured by the ACES. Associations between an instructors' TEI and the five following variables were also explored: program type, student age mix, course content, class size, and student gender. The correlational analyses showed that only two of the seven ACES subscales, Organization and Clarity and Affiliation, had statistically significant relationships with instructor's TEI.

TEI Score and Organization and Clarity ACES subscale

Correlational analyses of data revealed a statistically significant positive relationship between instructor's TEI and the ACES subscale Organization and Clarity (r = .25**, p = .00). In addition, the ACES subscale Organization and Clarity had statistically significant positive relationships to the MSCEIT Perceive Emotion dimension (r = .20**, p = .00) and the MSCEIT Use Emotion dimension (r = .25**, p = .00). This is an important finding because those instructors who attend to adult students' needs in the classroom perceive that intentionally planning, designing, and organizing

course content, expectations, and goals is important to the adult evening student who is seeking a master's degree. This finding also suggests that instructors who are able to perceive their students' understanding or confusion as a class proceeds may be able to make adjustments that provide needed structure and clarity for learning.

TEI score and Affiliation ACES subscale

Further correlational analyses of data revealed a statistically significant negative relationship between instructor's TEI and the Affiliation ACES subscale (r = -.19**, p = .00). Statistically significant negative relationships were found between the Affiliation ACES subscale and three of the MSCEIT dimensions: Perceive Emotion (r = -.16, p = .03), Use Emotion (r = -.20**, p = .01), and Manage Emotion (r = -.37**, p = .00). The lower the Affiliation scores, the higher the MSCEIT dimension scores for perceive, use, and manage emotion. The classroom is the psychological bridge for the adult learner seeking a master's degree, and the classroom social climate exerts potent effects on student achievement, attendance, and satisfaction. Therefore, student interaction and cohesion may not be as important to the adult evening student as the intentional planning, designing, and organizing course content of the instructor with the adult evening student's needs in mind.

Partial Correlations

Follow-up partial correlational analyses were conducted in instances in which statistically significant associations were shared the two major variables of interest, as well as confounding variables such as program type, class size, and course content. These

follow-up analyses between the Organization and Clarity ACES subscale and the TEI showed Program Type and Content influenced the strength of the correlation between the Organization and Clarity ACES subscale and the TEI. The correlation between Organization and Clarity and TEI was .25 (p = .00) when the covariates Program Type and Content were not considered in the analysis. However, after accounting for Program Type and Content separately and simultaneously in the analysis, the partial correlation between Organization and Clarity and TEI was increased. The results showed that Content is the more significant confounding variable affecting the relationship between the Organization and Clarity subscale and the TEI than Program Type. That is, when content is taken into account in the correlation, the association between TEI and Organization and Clarity was stronger. Education and criminal justice content strengthened the association between TEI and Organization and Clarity; the correlation was increased from .25 to .30 when the content variable (education and criminal justice) was included.

Limitations

The researcher recognizes the following limitations of this study:

1. The small number of instructors and courses lowers the power of statistical tests and therefore lessens the ability to detect a relationship, if it exists.
2. Missing data might be problematic, and might have limited the accuracy of the result data. The sample sizes of students became 162 instead of 167 after deleting missing data. However, missing instructor data may have been even more problematic since the number of participating instructors (N = 11) was

so small. Missing data were addressed by using the Dempster et al., (1977) expectation-maximization (EM) model in SPSS version 15. Still having to estimate value may have limited the accuracy of results.

3. Conducting the study at two small colleges in a Midwestern state may limit the results to these institutions and those of similar type.
4. Class size varied a lot from very small (e.g., 4) to relatively normal sized Graduate level classes (e.g., 19) and these variations may have made a difference in students' perceptions of class climate.

Discussion

The results of this study illustrate the relationship between instructor's TEI and the ACES Organization and Clarity subscale. Further, these results are examined in relation to the current literature on instructor's emotional intelligence and classroom environment. Suggestions are discussed relative to the literature reviewed in the dissertation and the findings of this study.

Lack of Significant Findings

The low level of association between the constructs measured by the two instruments (MSEIT and ACES) was not expected. There are several possible explanations: (a) The study was not robust in design as it could have been to find associations among the variables; (b) The relation between instructor TEI and course organization and clarity may be stronger and more evident than other associations. (c) The literature suggesting a relation among the variables of interest may be in error, or (d)

If EI is supposed to relate to instruction; could it be that classroom climate was a poor choice to capture that aspect of classroom instruction with which emotional intelligence is related? Finally, as noted earlier, class size varied a lot. Perhaps this variation in class size made a difference in students' perceptions of classroom climate.

Research on EI is now in its infancy. Maybe EI is less important for practice. More research on instructor EI and adult evening masters' level classroom climate is needed in order to explore the possible explanation for this study's results more completely.

TEI and ACES Organization and Clarity subscale

A statistically significant positive relationship was revealed between instructor's TEI and the ACES Organization and Clarity subscale. The higher the instructor's TEI score, the higher the instructor's Organization and Clarity subscale score. This relationship might be interpreted that the instructor with a competent TEI score, would intentionally plan, design, and implement class preparation, objectives, and organization when teaching he adult evening masters' level student. In this classroom environment, the teacher/instructor would present a clear sense of direction, adequately cover the subject matter, where students know what is expected of them, and classroom learning activities follow logical sequences (Darkenwald, 1989). When attempting to teach, it is important for the instructor to know the characteristics and needs of her/his students. Another explanation is that the emotionally intelligent instructor may be best able to detect levels of understanding and confusion of the students in a class and then make adaptations that provide the necessary structure and clarity to enhance student learning.

TEI score and ACES Affiliation subscale score

Correlational analysis revealed a statistically significant negative relationship between instructors' TEI and the ACES Affiliation subscale. This result is at first glance counter intuitive. The ACES Affiliation subscale is defined as student interaction and cohesion and is the extent to which students like and interact positively with each other (Darkenwald, 1989).This finding might be interpreted to mean that the instructor's emotional intelligence is unrelated to the natural affiliation and cohesion that develop within a group of learners. Further, the negative association between these two constructs may suggest that the more emotionally intelligent instructor may interfere with student cohesion by intervening in some unknown manner into the social life of the class. Rather, it could be that the emotional intelligence of the students themselves may be more important to developing a sense of affiliation among learners.

Partial Correlations

TEI, Organization and Clarity and Program Type and Content

Partial correlation results revealed that Content has more impact on the relationship between TEI and Organization and Clarity than Program Type. The proportion of variance of Organization and Clarity can be explained about 6.4% by TEI. When Program Type is controlled for the partial correlation, the explained variance increased about 1.83%, which becomes 8.23%. When Content is controlled for the partial correlation, the explained variance increased about 2.72%, which becomes 9.12%. When two variables are included for the partial correlation in the model, the explained variance

increased about 3.02%, which becomes 9.42%. Content has more impact on TEI and Organization and Clarity than Program Type.

This study finding may be interpreted that Content choice (business, criminal justice, education), regardless of which program design the student is enrolled (cohort or non-cohort), is related to students' perceptions of the course's Organization and Clarity.

Conclusions

This exploratory study had as its purpose to explore the relationship, if any, between an instructor's emotional intelligence and the seven ACES subscales of classroom climate in evening master's programs for adults. Based on results obtained from the data analyses, the following conclusions are made.

1. The evidence of association among the two constructs of interest was very limited. I have suggested several reasons why this result may have occurred and I recommend that additional studies of the relation between these two constructs be undertaken using different and more robust research designs.
2. Program Type and Content were found to be very important confounding variables in one instance. They therefore deserve additional study as related to the constructs of emotional intelligence and classroom climate.
3. It is important to know your students' needs and characteristics.

The finding that the relationship between TEI and Organization and Clarity is strengthened when considering program type and content is important to those instructors who attend to adult evening students' needs. Those instructors perceive their adult students, seeking a master's degree, and want to be organized and clear in their

presentation of content, expectations, and class goals. The instructor with a competent level of EI by looking at their students' faces can see understanding or perceive from looking at their faces that they are confused and can make changes in organization and clarity that enhance student learning. The instructor with the ability to perceive, use, understand and manage emotional intelligence enables the adult evening student to accomplish her/his personal and professional goals by efficient presentation of content whether in a cohort or non cohort program design. For the adult evening instructor, that translates into job satisfaction. For the college or university, that translates into higher enrollment, and positive word of mouth advertising.

Recommendations for research and practice

I recommend the following for future research. Limitations of this study, as well as new knowledge gained, suggest that additional research in the area of the relationship of instructor emotional intelligence and classroom climate, specifically for evening adult master's level students, is needed. Additional research using the ability-based survey (MSCEIT) should be done with a much larger sample size.

The ACES has been used primarily in undergraduate settings. It needs to be used more in adult graduate settings in order to explore its validity and reliability to these settings where the variety of cultures and adult roles may be different from those in adult undergraduate classrooms.

In future research, having a larger number of instructors in evening masters' level program participation would contribute to a more robust study. The results of the present study should not be viewed as the final word on the association between EI and

perceptions of classroom environment, since instructor proficiency in EI has been hypothesized to influence effective communication, instruction and classroom environment (Brackett & Katulak, 2006).. Rather, given the limitations highlighted for the present study, more research with larger samples in more diverse settings (institutional, cultural, and geographic) is strongly recommended.

Instructor TEI and the Connecting Classroom

Since the classroom is seen as the center stage for learning for adults, (Graham et al., 2000), how the instructor/teacher plans, designs, develops and delivers content is the central task. In their metaphor of the connecting classroom Graham et al., (2000) state that" the connecting classroom has a number of key elements which include: (a) Ethos of an adult-oriented environment, (b) Learning of expertise, (c) Nature of teaching learning process, and (d) Living in a multicultural learning society (p. 12). The connecting classroom metaphor represents an attitude more than a system, with sets of expectations and behaviors of collegiate personnel toward adult learners (Graham et al., 2000) of which the instructor's emotional intelligence may very well play a part. Here the learner of any age and situation experiences an attitude of caring and concern, enabling learners through key relationships and interactions to integrate their life experiences with that academic discipline. The nature of learning expertise is learning through classroom and life participation in many different social domains, requiring engagement, understanding, and conversation in many social domains. What is needed is more research into this possibility to determine what the associations really are between classroom climate and emotional intelligence.

Adult learners expect more than a good grade. In the connecting classroom, adult learning is constructed "through the adult learner's life biography, through the social context of knowledge expertise, and through the communities of practice of its members" (Donaldson et al., 1999). For the adult learner, the connecting classroom suggests another worldview, where the adult learner actively engages in many conversations across many cultures. Lifelong learning and the importance of intellectual capital in also suggested in the connecting classroom metaphor (Graham et al., 2000).

An instructor's total Emotional Intelligence (TEI) contributes to the connecting classroom, through the use of her/his abilities to perceive, use, understand, and manage emotions. As this study demonstrated this is particularly the case for that dimension of classroom climate that addresses organization and clarity. Those abilities, improving with education, use and experience, support the instructor in moral action and judgment (Hargreaves, 1998) in creating a classroom environment where respect, engagement in learning, and joy in learning, charms the adult student to continue in the path of the lifelong learner.

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APPENDICES

APPENDIX A

IRB Communication

Telephone/email Script

~ my name, doctoral student in MU ELPA program, completing my dissertation.

~ request time to discuss your willingness to explore the possibility for your Instructors and your students in the Adult Masters' Evening Program to participate in my research project.

~ purpose of dissertation is to explore relationship of measured emotional intelligence ability of an instructor to students' perception of that Instructor's classroom environment, with the classroom being the unit of analysis.

~ research for this study involves having instructors in the Adult Masters' Evening Program who consent to participate, complete the MSCEIT instrument.

~ return the completed MSCEIT to me in stamped, self-addressed envelope.

~ the MSCEIT is an ability-based scale, measuring how well people perform tasks and solve emotional problems.

~ the MSCEIT survey requires approx. 30 minutes to complete.

~ the results of instructor's MSCEIT survey will be compared to the student's perception of the Adult Classroom Environment Scale (ACES) results for that classroom, with the classroom being the unit of analysis.

~ the ACES takes about 10 minutes to complete.

~ the ACES measures students' perceptions of adult learning environment and teaching effectiveness.

~ I would administer the ACES in class after verbal/written consent is obtained.

~ informed consent and survey completion would require 15 to 20 minutes of class time.

~ the responses to the MSCEIT and ACES will be compared with each classroom being the unit of analysis and compared to that classroom Instructor's response to the MCSEIT.

~ the individual responses by the Instructors and students are completely confidential and anonymous.

~ confidentiality of all participants will be protected throughout the study.

~ no participant or college will be identified in reporting results.

~ participation by Instructor and students in that classroom is completely voluntary.

~ participation may be withdrawn at any time without penalty.

~ I would request a list of faculty names from your Adult Master's Evening Program who will be instructing the week of November 12-20, 2006.

~ due to limited information available on the emotional intelligence of an Instructor and adult classroom environment, I would very much appreciate your willingness to explore the possibility of participation by Adult Masters' Evening Program level Instructors and students in that Instructor's classroom

~ for questions re this research project, please feel to call me .

~you may also contact my Faculty Advisor. May I come to your office next week to pick up the Instructor List for the week of November 12-20? (Or) should I (Or) would you email instructors who will be teaching next session to give a critique of my research dissertation project for possible participation in my research project? Thank you.

I look forward to the pleasure and opportunity to work with you, your instructors, and your adult evening masters' level students.

Sincerely,

Peg Heckathorn

14 September, 2007

APPENDIX B

ACES Consent and Survey Forms

I agree to participate in a study being conducted by Peg Heckathorn, a graduate student in the Department of Educational Leadership and Policy Analysis . Ms. Heckathorn's study, entitled *The Relation of Instructor Emotional Intelligence with Classroom Climate in Evening Master's Programs for Adults*, explores the relationship between emotional intelligence of the instructor and the classroom climate using the connecting classroom concept. **I UNDERSTAND THAT MY PARTICIPATION IS COMPLETELY VOLUNTARY AND THAT I MAY DISCONTINUE MY PARTICIPATION AT ANY TIME WITHOUT PENALTY.** I also may decline to answer any questions that may be asked without the need to give an explanation.

The purpose of the Adult Classroom Environment Scale (ACES) questionnaire is to find out what the class you are now attending is like. This is not a test. There are no right or wrong answers. Please give your honest opinions about the class you are attending **now.** Your answers are anonymous—your teacher will not see them. If I agree to participate, I understand that I will complete in class by hand the ACES questionnaire, requiring 10 to 20 minutes of in class time.

Your contribution is very important and will help determine adult students' perceptions of the classroom climate. These findings will further benefit instructors in adult education in crafting a positive classroom climate. There are no foreseeable risks or discomforts to participation in this research. Your participation is completely voluntary.

Your answers are anonymous. Records will remain locked in a file cabinet. Participation in this research will not affect your grade or your standing in class.

If I agree to participate, I understand that Ms. Heckathorn will summarize the research findings to her dissertation committee, and that she may have occasion to report the results of her study in professional presentations and journal articles, with the identity of all participants kept anonymous.

If I have questions about this research project, I am encouraged to contact Ms. Peg Heckathorn . You may also contact Ms. Heckathorn's faculty advisor.For additional information regarding human subject participation in research, please feel free to contact the Campus IRB Office.

I confirm that the purpose of this research, risks, and the study procedure have been explained to me. I have read this consent form and my questions have been answered. I agree to participate in the study.

_____ _____ Date _____

Participant's Signature Investigator's Signature

ADULT CLASSROOM ENVIRONMENT SCALE

Completion of this questionnaire indicates consent by the participant as part of the doctoral research conducted by Peg Heckathorn.

Directions: The purpose of this questionnaire is to find out what the class you are now attending is like. This is not a test. There are no right or wrong answers. Please give us your honest opinions about the class you are attending **now**. Your answers are anonymous—your teacher will not see them.

The questionnaire will take about 10 minutes to complete. I thank you in advance for taking the time to complete the questionnaire carefully. Your opinions are very important and will help determine adult students' perceptions of the classroom climate. This research will further assist instructors in adult education create a positive classroom climate.

For each of the statements below, go through the following steps:

-- Read the statement carefully and decide how well it describes the class you are now attending. (The word "class" refers to whatever type of educational activity you are presently involved in; it can be a course, workshop, seminar, etc.)

Indicate your opinion by circling one of the choices provided. Be sure that you circle only one choice for each statement. (It is okay to cross out a choice if you change your mind. Be sure to circle a choice for each and every statement; do not leave any blanks).

DOES THE STATEMENT DESCRIBE YOUR CLASS?

STATEMENTS	Strongly Disagree	Disagree	Agree	Strongly Agree
1. Students help to decide the topics to be covered in the class.	SD	D	A	SA
2. The class is flexible enough to meet the needs of individual students	SD	D	A	SA
3. The teacher comes to class prepared	SD	D	A	SA

DOES THE STATEMENT DESCRIBE YOUR CLASS?

STATEMENTS	Strongly Disagree	Disagree	Agree	Strongly Agree
4. Students are often bored in class	SD	D	A	SA
5. The teacher often talks about things not related to the course	SD	D	A	SA
6. Many students think that the class is not relevant to their lives	SD	D	A	SA
7. Students often ask the teacher questions	SD	D	A	SA
8. The students in the class work well together	SD	D	A	SA
9. Learning objectives were made clear at the start of the course	SD	D	A	SA

10. The teacher makes all of the decisions in the class . . . . . SD D A SA

11. Most students enjoy the class . . . . . SD D A SA

12. The teacher expects every student to learn the exact same thing . . . . . SD D A SA

13. Students in the class can select assignments that are of personal interest to them . . . . . SD D A SA

14. The teacher makes every effort to help students succeed . . . . . SD D A SA

15. The teacher talks down to students . . . . . SD D A SA

16. Students rarely meet assignment deadlines . . . . . SD D A SA

17. Students often share their personal experiences during class . . . . . SD D A SA

DOES THE STATEMENT DESCRIBE YOUR CLASS?

STATEMENTS	Strongly Disagree	Disagree	Agree	Strongly Agree
18. Students often discuss things not related to course content	SD	D	A	SA
19. Activities not related to course objectives are kept to a minimum	SD	D	A	SA
20. Most students look forward to the class	SD	D	A	SA
21. Most students in the class pay attention to what the teacher is saying	SD	D	A	SA
22. The class is well organized	SD	D	A	SA
23. The teacher encourages students to do their best	SD	D	A	SA

24. Students do a lot of work in the class . . . . . SD D A SA

25. A few students dominate the discussions in the class . . . . . SD D A SA

26. The class has a clear sense of direction . . . . SD D A SA

27. The subject matter is adequately covered . . SD D A SA

28. The teacher sticks to the lesson plan regardless of student interest . . . . . SD D A SA

29. Most students take part in class discussions. SD D A SA

30. Students do not know what is expected of them . . . . . SD D A SA

31. The students in the class often learn from one another . . . . . SD D A SA

32. Most students in the class achieve

DOES THE STATEMENT DESCRIBE YOUR CLASS?

STATEMENTS	Strongly Disagree	Disagree	Agree	Strongly Agree
their personal learning goals	SD	D	A	SA
33. The students in class enjoy working together	SD	D	A	SA
34. The teacher cares about students' feelings. .	SD	D	A	SA
35. The teacher tries to find out what individual students want to learn	SD	D	A	SA
36. Getting work done is very important to the class.	SD	D	A	SA
37. Students participate in setting course objectives	SD	D	A	SA

38. The class is more a social hour than

a place to learn . . . . . SD D A SA

39. The teacher dominates classroom

discussions . . . . . SD D A SA

40. The teacher respects students as

individuals . . . . . SD D A SA

41. Learning activities follow a logical

sequence . . . . . SD D A SA

42. Students seldom interact with one

another during class . . . . . SD D A SA

43. Students have the opportunity to

learn at their own pace . . . . . SD D A SA

44. The teacher likes the students in the

class . . . . . SD D A SA

45. Students in the class feel free to

DOES THE STATEMENT DESCRIBE YOUR CLASS?

STATEMENTS	Strongly Disagree	Disagree	Agree	Strongly Agree
Disagree with one another	SD	D	A	SA
46. Many friendships have developed in the class	SD	D	A	SA
47. Students feel free to question course requirements	SD	D	A	SA
48. The teacher cares whether or not the students learn	SD	D	A	SA
49. The teacher insists that you do things his or her way	SD	D	A	SA

The following information is also needed for my research. Please indicate your date of birth, gender, and ethnicity below.

Date of birth _____

Please circle appropriate response for your gender: Female Male

Please circle appropriate response for your ethnicity:

Alaska Native Asian African American Black Hispanic Latino

Native American Indian Native Hawaiian Other Pacific Islander White

Other _____

Length of time in years and parts of years (e.g., 3.5 years) between receiving your bachelor's degree and entering this program

_____

What college degrees do you have?

_____

Thank you for your help!

Cover Sheet for ACES Response

COVER SHEET FOR ACES RESPONSES

INSTITUTION _____

COURSE CONTENT _____

MASTER'S DEGREE PROGRAM_____

INSTRUCTOR _____

PROGRAM TYPE: COHORT_____ OTHER_____

APPENDIX C

Purpose of the MSCEIT and MSCEIT consent, and MHS copyright policy

Directions for completing the MSCEIT (Mayer-Salovey-Caruso Emotional Intelligence Test)

The MSCEIT is designed to measure the abilities that make up emotional intelligence. The test will provide feedback in four areas:

1. Perceiving Emotions – the ability to recognize how you and those around you are feeling.
2. Facilitating Thought – the ability to generate emotions, and use them to enhance reasoning and other cognitive tasks.
3. Understanding Emotions – the ability to understand simple and complex emotions.
4. Managing Emotions – the ability to manage emotions in the self and in others.

Contents of the MSCEIT

Participants will be asked to solve a series of emotional problems. These problems are arranged in eight clusters, labeled from "A" to "H," the questions involve identifying emotions in faces and pictures, comparing emotional feelings to other sensations such as those of heat and colors, and many others. No personal questions are asked beyond a few questions such as participant age and gender, which are necessary for scoring the test.

Sample questions from the MSCEIT: "How much is each feeling below expressed by this picture?" and "What mood(s) might be helpful to feel when creating new, exciting decorations for a birthday party?"

Completing the MSCEIT

The MSCEIT takes about 30 to 45 minutes to complete. Some individuals will take a little less time, some a little more. The questionnaire is untimed, and there is no penalty for taking a break while filling in the response sheet.

The MSCEIT is an ability questionnaire, although there are no right or wrong answers. Some answers get higher score than others; for some items, partial credit is given.

Guessing on items is allowed; points are not lost for incorrect answers. Partial credit is given for many answers. In order to complete scoring, the demographic area on the response sheet (Age, Gender, and Ethnicity) must be completed. Only number identifiers will be used.

Results

The MSCEIT Resource Report interprets the results, and provides feedback about participant's emotional intelligence. A copy of participant's MSCEIT Resource Report will be provided to participant.

MSCEIT Informed Consent

I agree to participate in a study being conducted by Peg Heckathorn, a graduate student in the Department of Educational Leadership and Policy Analysis . Ms. Heckathorn's study, entitled *The Relation of Instructor Emotional Intelligence with Classroom Climate in Evening Master's Programs for Adults*, explores the relationship between emotional intelligence of the instructor and the classroom climate using the connecting classroom concept. I understand that my participation is voluntary and that I may discontinue my participation at any time without penalty. Also, I may decline to answer any questions that may be asked without the need to give an explanation.

If I agree to participate, I understand that I will complete by hand the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) questionnaire, requiring 30 to 45 minutes out of class time. I understand that the MSCEIT measures how well people perform tasks and solve emotional problems. I agree to return the MSCEIT response form and booklet in the self-addressed, stamped envelope to the researcher: Peg W. Heckathorn. The MSCEIT Resource Report interprets the results and provides feedback about your emotional intelligence. The MSCEIT Resource Report form will be scored and analyzed by Multi-Health Systems, Inc.

There is an increased enrollment in evening adult education masters' level programs due to increasing life spans, earlier and longer retirements, expanded options for new careers, and emphasis on self-actualization in retirement. This increased, diverse enrollment presents new challenges to adult educators. Your participation would contribute to further insight into the nature of adult student learning, to the art and craft of adult educators, and to the knowledge bank of emotional intelligence and learning.

There are no foreseeable risks or discomforts to participation in this research. Your participation is completely voluntary. Your answers are confidential. Records will remain locked in a file cabinet after being scored and analyzed by Multi-Health Systems, Inc. Participation in this research will not affect your performance evaluations or job opportunities for job advancement.

If I agree to participate, I understand that Ms. Heckathorn will summarize the research findings to her dissertation committee, and that she may have occasion to report the results of her study in professional presentations and journal articles, with the identity of all participants kept confidential.

If I have any questions about this research project, I am encouraged to contact Ms. Peg Heckathorn . I may also contact Ms. Heckathorn's faculty advisor. For additional information regarding human subject participation in research, please feel free to contact the Campus Institutional Review Board Office.

I confirm that the purpose of this research, risks, and the study procedure have been explained to me. I have read this consent form and my questions have been answered. I agree to participate in the study.

_____ _____ Date _____

Participant's Signature Investigator's Signature

From: Kari Matusiak [mailto:kari.matusiak@MHS.com]

Sent: Wed 6/20/2007 8:37 AM

To: Heckathorn, Peg W.

Subject: RE: Qualification Form

Good afternoon. My name is Peg Heckathorn. I am a doctoral student in the Educational Leadership and Policy Analysis Program. I have successfully defended my dissertation research proposal, and am in the process of completing the IRB application process. In my research design, instructors at 3 nontraditional evening adult masters' programs will be asked to complete the MSCEIT questionnaire, which I purchased from Multi Health System, Inc. Because of Multi Health System Inc.'s copy right policies, I will be unable to upload the MSCEIT and the MSCEIT Response form (please see email below from Kari Matusiak dated 6-22-7). My advisor suggested I communicate to you MHS's copy right policies. Please advise.

The second question I have re my has to do with Section A - Research Staff. On Monday of this week, when I was "refining" the IRB application, I did not have a box option with dotted lines around the option "Remove" under the 5th column to the right, titled "REMOVE" on the line noting my name and the ELPA dept. and my student investigator role. I did not have a box option with dotted lines around the option "Remove" under the 5th column to the right, titled "REMOVE" on the line noting Joe Donaldson, ELPA, and role --advisor. Yesterday evening when opening up both of these options came on my screen under the REMOVE column. Did these options appear because I answered more of the sections of this application?

Thank you in advance for taking the time to respond to my email concerns. Peg Heckathorn

From: Kari Matusiak [mailto:kari.matusiak@MHS.com]

Sent: Fri 6/22/2007 8:21 AM

To: Heckathorn, Peg W.

Cc: Catherine Wong

Subject: RE: Qualification Form

Peg,

Unfortunately due to copy right policies I cannot give you permission to copy the item booklet to use in your dissertation study. You will need to purchase the number of item booklets that you will need to submit. This being said, the item booklets are reusable, so you can potentially use the same item booklets that you used in your research to submit to your dissertation board.

The MSCEIT item booklets come in packages of 3 for 50$. I will give your order request to customer service. Please be advised that you will need to order response forms and scoring service. Catherine Wong will be able to outline exactly what you will need to order. Her email is Catherine.wong@mhs.com and her direct line is 1-800-456-3003 ext.280.

Thank you,

Kari Anne Matusiak

Business Development Coordinator

Corporate Division, MHS Inc.

1-416-492-2627 ext. 290

-----Original Message-----

From: Heckathorn, Peg W.

Wednesday, June 22, 2007 7:32 AM

To: Kari Matusiak

Subject: RE: Qualification Form

Importance: High

Hi Kari. I have received the MSCEIT item booklet. Thank you.

I will need a minimum of 20 copies to complete my research project for my dissertation involving EI and the adult classroom environment. Please see my completed forms I (and my advisor) completed and sent to Lisa back in August, 2006. I am ccing my advisor.

In anticipation that my proposal will be approved, may I make color copies of the MSCEIT item booklet to use in my dissertation research study? If not, please advise.

Thank you. Peg Heckathorn

_____

Peg,

I have placed the MSCEIT item booklet in the mail; it should reach you by Friday of this week. If you have not received it by this time, please let me know and I will track the package.

Again, I apologize for the delay in action. Good luck with the presentation.

Sincerely,

Kari Anne Matusiak

Business Development Coordinator

Corporate Division, MHS Inc.

1-416-492-2627 ext. 290

-----Original Message-----

From: Heckathorn, Peg W

Tuesday, June 19, 2007 6:03 PM

To: Kari Matusiak

Subject: FW: Qualification Form

Importance: High

Hi again, Kari. Please see emails below sent to Lisa back in August, 2006. I am again requesting a copy of the MSCEIT to have to discuss at my research proposal presentation. Please send by June 24. Thank you. Peg

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From: Heckathorn, Peg W.

Sent: Mon 6/18/2007 10:28 PM

To: kari.matusiak@MHS.com

Subject: FW: Qualification Form

Hi Kari. Please see emails below sent to Lisa Sorensen. I am requesting a copy of the MSCEIT to have to discuss at my research proposal presentation. Please send by June 24. Thank you. Peg Heckathorn

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From: Heckathorn, Peg W.

Sent: Sun 6/10/2007 1:36 PM

To: kari.matusiak@MHS.com

Subject: FW: Qualification Form

Hello again. I rec'd a system response that you were unable to receive this email. I am attempting to resend. Please see emails below from Lisa. Thank you. Peg

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From: Heckathorn, Peg W.

Sent: Fri 6/8/2007 1:46 PM

To: kari.matusiako@MHS.com

Subject: FW: Qualification Form

Hi Kari. As you can see in the email to Lisa below, I have faxed all of those forms and have paid for and received the MSCEIT manual back in August, 06.

I will need the copy before June 24. I am ccing my advisor so he will be in on the communication loop.

Thank you. Peg

From: Lisa Sorensen [mailto:lisa.sorensen@mhs.com]

Sent: Thu 8/3/2006 8:49 AM

To: Heckathorn, Peg W.

Subject: Qualification Form

Hello Peg,

Thank you for having the qualification form completed and faxed back. I have processed your order for the MSCEIT manual which you should expect to receive within 4-10 business days.

Regards,

Lisa Sorensen

Client Service Specialist-Corporate Markets

Email: lisa.sorensen@mhs.com

Multi-Health Systems Inc.

In Canada: 3770 Victoria Park Avenue, Toronto ON, M2H 3M6: 800-268-6011 ext. 317

In US: P.O. Box 950, North Tonawanda, NY 14120-0950: 800-456-3003 ext. 317

International: +1-416-492-2627 ext. 317

Fax: +1-416-492-3343: Toll free in Canada and the US, 888-540-4484

Visit our website: www.mhs.com

VITA

Peggy Williams Heckathorn was born December 7, 1946, in Memphis, Tennessee. She is the fifth child of Vernon and Bernice Williams. She attended public schools in Columbus, Ohio. She received the following degrees: A.D. in Nursing from Central Methodist College, Fayette, Missouri (1980); B.A. in Psychology and Health from Stephens College, Columbia, Missouri (1992); M.Ed. in Curriculum and Instruction, William Woods University (1996);

She is married to Bob Heckathorn of Braselton, Georgia. She has a daughter, Megan Holcomb.