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Trait Emotional Intelligence (EI) and Job Satisfaction: A Quantitative Analysis of Faculty that Teach Online

by

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DISSERTATION

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Dedication

To Kate and Claire, for always being my True North.

And to the exceptional women that blazed this trail before me, always modeling the highest levels of emotional intelligence, both online and face-to-face, Dr. Patsy Boverie, Dr. Lani Gunawardena and Dr. Deb La Pointe.

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Taking a page from Diana Nyad who, upon completing the swim of her life, said,

"I have three messages: one, never ever give up; two, you are never too old to chase your dreams; and three, it looks like a solitary sport but it takes a team."

Truer words were never spoken.

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Abstract

While the construct of emotional intelligence (EI), has been researched and discussed for nearly 25 years, most research of this variable has been done within traditional learning and workplace environments, namely face-to-face settings (Rudestam & Schoenholtz-Read, 2009), not the online learning environment, where, over the last ten plus years, education has largely been focused (Allen & Seaman, 2013). Mortiboys (2012), along with Powell and Kusuma-Powell (2010), found that successful college faculty tend to possess high levels of trait EI in traditional or face-to-face classroom settings, and yet, to date, very few similar studies have been conducted with faculty teaching in an online setting.

This study sought to determine whether a relationship existed between self-assessed EI scores of university faculty members teaching at least one course online and their own job satisfaction levels. This study also sought to explore EI and job

satisfaction scoring differences tied to the gender of the online instructors, utilizing the Trait Emotional Intelligence Questionnaire short form (Petrides and Furnham, 2004) and the Job Satisfaction Survey (Spector, 1985).

A sample of 72 faculty members that taught at least one course in an online format agreed to complete a self-report instrument. Data was analyzed using simple correlations and grounded theory principles (Glaser and Strauss, 1967). Deductive reasoning was applied to the original research questions and quantitative results and inductive reasoning to assess the qualitative responses.

Results indicated that trait emotional intelligence is only slightly, positively linked to faculty job satisfaction levels, more so for females than males. An analysis of statistically significant correlations at the factor level was also conducted. The study concludes with a discussion of results, limitations and implications for future research in this area.

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Chapter 1

INTRODUCTION

1.1 Background

Dan Pink, in his 2006 book, *A Whole New Mind*, cast a bright light on the idea that what has been a knowledge-based society is giving way to a more creative society, one where we rely heavily on the skills of design, empathy, symphony (harmonious combination of elements), and human connection over the skills of traditional, usually linear thinking, and output (Pink, 2006). In other words, the best jobs and strategic needs of tomorrow are shifting to require much more in the way of creativity, inclusiveness, and communication via a wide range of modalities, in tandem with exceptional people skills. Pink, author and futurist, served as the harbinger of generational change: The world is changing, and technology is at the forefront of these seismic shifts. Today, more than ever, research is proving out that while a high IQ is one of the initial hurdles that typically must be cleared for entry into any credible institution of higher education or any professional employment position, it is by no means the only hurdle, and today, many researchers, myself included, believe it's not the most important barometer to success.

The proposition that IQ tests cannot comprehensively capture individual differences in human cognitive ability is a decades old debate and has received considerable attention from cognitive ability scientists (Petrides, 2009b). This level of uncertainty has made room for a variety of new claims about many varied forms of intelligence, including creative, emotional, personal, and spiritual, some based on nothing more than speculation (Brody, 2004). Broadly speaking, however, the construct of Emotional Intelligence (EI), as an alternate form of intelligence has been researched extensively over the past 25 years with significant research in place solidifying the validity of EI as a sound, alternate form of intelligence (Petrides, 2009b).

In October 1995, TIME Magazine's cover article was titled, *The EQ Factor*, and author Nancy Gibbs wrote, "IQ gets you hired, EQ gets you promoted" (Gibbs,

1995, p.66) paraphrasing what hiring executives conveyed was very much the reality of the time. In 1995, Emotional Intelligence (EI) or Emotional Quotient (EQ), as it's often also referred to, was a five-year-old concept, and I was a human resources manager responsible for hiring the best technical talent available to work on NASA's Jet Propulsion Laboratory's unmanned space flight projects. While crisscrossing the country, recruiting aeronautical engineers and other technical geniuses, I quickly learned that while having a perfect 5.0 GPA from MIT might qualify someone as a technical expert, it didn't necessarily ensure that the same person could function effectively with others, serve well in a team-based, collaborative atmosphere, or garner the support and trust needed to succeed in today's workplace. Over the course of just a few years, I saw many of these promising, gifted new hires lose their jobs or get moved to less visible, less critical roles, for lacking traits that had little or nothing to do with the initial reason they first were hired but had everything to do with their inability to "get along well with others." Reading the TIME article helped solidify concepts for me that until then, I had no name for but unquestionably had exposure to in the real world. As the field of EI has expanded, my interest has expanded along with it, so much so that my dissertation research was devoted to learning more about how qualities of EI affect the expanding world of instructors operating in online learning environments.

1.2 Statement of the Problem

Online learning has begun to eclipse face-to-face learning in terms of the sheer numbers of learners choosing to access higher education via nontraditional delivery methods (Allen & Seaman, 2010). Online enrollments experienced a 21% growth from 2002-2009, far exceeding the less than 2% growth of the overall higher education student population over the same period. Just over 30% of all higher education

students now take at least one course online (Allen & Seaman, 2013). Education no longer is restricted to face-to-face opportunities and interactions, nor limited to occurring at the same synchronized time or at the same location (Brown & Duguid, 2000). Today, education at all levels can and does transcend barriers of distance and time as learners take advantage via the Internet of educational opportunities at home and across the globe.

The Sloan Foundation's 2010 report, *Class Differences: Online Education in the United States*, reported that more than 5.6 million students were taking at least one online course during the fall 2009 term, an increase of one million students from the previous year. Today, nearly 75% of the 2,500 institutions of higher education surveyed by the Sloan Foundation said they are seeing an increase in demand for online courses and programs, partially as a result of the economic downturn, which began in 2008 and partly due to the variety of courses expanding to an online format (Allen & Seaman, 2010). As a result, the body of literature for online learning is growing rapidly as educational institutions expand their offerings in online courses and programs and as advances in computer and web technology provide new and improved ways to communicate and collaborate online (Lewin & Markoff, 2013).

While a great deal of documentation exists about the mechanics of how online curriculum can best be transmitted to today's learners, little research has focused on targeting the emotional connectedness and job satisfaction levels of faculty members teaching online. This researcher finds the timing of this study particularly important as many of the financial incentives that once were in place to lure faculty to an online environment are waning, and yet demand for online teaching is at an all-time high.

Indeed, a gap now appears to exist in the research regarding how and to what degree the EI traits of online faculty members impact their job satisfaction and performance levels in the online classroom. EI has been studied in higher education, but focus has been primarily on leadership roles in higher education, including

department chairs and presidents (Milhoun, 2007). Yet, focus on EI levels in faculty members, especially faculty teaching online, is lacking. Today, faculty members at every level (including adjunct) and from all disciplines are expected to shift effectively and seamlessly to an online teaching environment because online student enrollment levels are rising quickly (Allen & Seaman, 2013). Therefore, it's imperative, that online instructors be provided with the support they need to maintain high quality, effective teaching practices, in an online format. Online instructors are now often thought of as facilitators and must learn to navigate classroom activities using discussion boards, chat rooms, video and other tools, to enhance the online experience for all involved (Conceicao, 2006; Shapiro, 2006; Thompson, 2006; Yang & Cornelious, 2004). Yet, little research exists on which interpersonal skills or traits work best for online faculty as they work to negotiate successful transitions from traditional classroom settings to online learning environments.

1.3 Purpose Statement and Approach

For this study, online faculty instructors from a Southwestern U.S. university were invited to complete a self-report questionnaire measuring trait emotional intelligence (EI) and job satisfaction levels. Beyond the 66-Likert style questions in the survey, the participants were also asked to respond to eight open-ended questions designed to gain additional insight into their respective feelings about teaching in an online environment. The open-ended questions included, "What do you like BEST about teaching online?" and "What do you like LEAST about teaching online?" As well as, "What, if anything, surprised you about teaching online?" Finally, six demographic questions were asked at the conclusion of the survey.

The purpose of this quantitative correlational study was to investigate the relationship between EI levels and job satisfaction levels. The researcher hypothesized

that female online instructors would score themselves higher in EI competencies than male online instructors, which would also correlate with higher job satisfaction levels. The results may contribute to the developing field of EI and online learning environment research, further validating the construct of EI and understanding better its place among well established constructs (i.e., personality).

From a practical perspective, these findings ideally will assist university administrators and online faculty to better understand the expectations of university instructors who shift into online teaching roles to meet their own motivational needs. The variables in this study were emotional intelligence levels (EI), job satisfaction levels of participating faculty, and gender of faculty participants. The participants included university faculty - both tenure track and non-tenure track - at this particular Southwestern university who taught at least one class online during the spring 2014 semester.

1.4 Significance of the Study

This study contributed to extant literature on adult education regarding the effective teaching practices and job satisfaction levels of online faculty members. The findings may serve to help guide administrators in higher education in making professional development decisions regarding faculty-training efforts. Improving professional development for online faculty members also may enhance the student learning experience.

According to recent literature, conflicting faculty trait EI levels may cause challenges in the traditional classroom as faculty who exhibit a high level of trait EI tend to create higher quality professor/student relationships, and a classroom environment that is more nurturing, one that builds trust more quickly, and is conducive to student learning and better participation (Mortiboys, 2012; Powell & Kusuma-Powell,

2010). While conversely, faculty who use low levels of EI in a traditional classroom, often struggle to create and sustain high-quality relationships with their students due to their perceived cold, distant, and aloof behaviors (Powell & Kusuma-Powell, 2010, p. 92). Moreover, professors in face-to-face settings, who incorporate high trait EI skills into their classrooms tend to be better able to regulate their emotions and modify their behavior in an effort to minimize damage between professor and student (Mortiboys, 2012). It's important to note that these studies took place in traditional, face-to-face learning environments where all involved could see one another and react to nonverbal messages, which are communication benefits not typically available, or at least greatly reduced, in an online setting.

EI scholars have long argued that EI competencies can be taught and enhanced to improve life and work situations (Bar-On, 2004; Goleman, 1995, 1998; Mayer, Roberts, & Barsade, 2007; Mayer, Salovey, & Caruso, 2004). Therefore, understanding existing EI levels of online faculty members seems very relevant and necessary as we seek new ways to enrich the online experience for faculty and students alike.

1.5 The Case for Studying EI Online

Since the construct of EI was introduced to the scientific community nearly 25 years ago, (Salovey & Mayer, 1990), debate has taken place as to the theoretical and empirical utility of this supposedly "new" construct. While comparatively young, versions of this construct have actually been present for nearly 100 years. The origins of EI can be traced to the concept of "social intelligence" defined by E. L. Thorndike in 1920 to refer to the ability to understand and manage people and to act wisely in human relations (Guilford, 1967).

Additional roots lie in the work of Howard Gardner (1983) in his concepts of intrapersonal and interpersonal multiple intelligences as well as in the work of Yale

psychologist Robert Sternberg, who challenged the status quo regarding cognitive intelligence (Sternberg, 1997). Sternberg hypothesized that the link between cognitive tasks and psychometric test scores was weak and that enlightened researchers would be wise to shift focus away from memory-based approaches in testing for intelligence (1997). Salovey and Mayer defined the construct (1990) more clearly, and along with Dan Goleman, a Harvard educated psychologist and New York Times science writer, and author of the 1995 best-selling book, *Emotional Intelligence: Why it can matter more than IQ*, helped to solidify EI's place in history and today's academic and business realms.

After 1995, articles on EI began to appear with increasing frequency across a wide network of academic and popular outlets, yet little investigation has occurred into the construct of EI as a predictor of success in online learning environments (Imel, 2003). Today, the literature is replete with examples of examining EI factors in leaders, subordinates, organizations, classrooms and other bricks-and-mortar settings, yet, nearly all of the research to date focuses on EI in face-to-face settings. Few examples can be found of EI in practice relevant to the expanding world of online learning or online communications. As online learning becomes more popular at all levels of education, the need to examine the relationship between EI, online learning, and learner satisfaction levels also increases in importance (2003). In fact, due to the increased popularity and expansion of the online world, the urgency to improve the online learning experience for instructors of both genders, has never been greater.

1.6 Definitions

Terms Relevant to Trait Emotional Intelligence and Job Satisfaction, are:

Emotional Intelligence (EI): EI refers to the global trait EI score defined by the

Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF; Petrides & Furnham, 2006), adapted from the Trait Emotional Intelligence Questionnaire.

Fifteen facets: The Trait Emotional Intelligence Questionnaire (TEIQue) measures 15 facets (Petrides, 2009a), The facet level is the lowest level at which trait EI is measured in the TEIQue and merits development through training (Nelis, Kotsou, Quoidbach, Hansenne, Weytens, Dupuis, & Mikolajczak, 2011; Petrides, 2009a). The definitions for each facet are included in Appendix A.

Four factors: the four factors measured by the TEIQue: emotionality, self-control, sociability, and well-being; is the second-lowest level measured by the TEIQue, and each factor is comprised of one or more of the 15 facets of the TEIQue (Petrides, 2009).

1. Emotionality: a TEIQue factor that is the level at which individuals are able to be in touch with their own and other people's feelings (Petrides, 2009).
2. Self-control: a TEIQue factor that measures the extent to which an individual controls impulses, regulates external pressures and stress, and manages their emotions in an effective manner (Petrides, 2009).
3. Sociability: a factor of the TEIQue that measures an individual's ability to create and sustain relationships with others (Petrides, 2009).
4. Well-being: a factor of the TEIQue that measures the happiness and fulfillment of an individual (Petrides, 2009).

Trait emotional intelligence: a constellation of emotion-related self-perceptions located at the lower levels of personality hierarchies (Petrides, 2009a, p. 12). It incorporates the 15 facets, four factors, and a global trait EI score, and is measured by the Trait Emotional Intelligence Questionnaire (TEIQue).

Job satisfaction: Job satisfaction includes nine facets as identified by the Job Satisfaction Survey (JSS) and self-reported by the faculty participants in Spector's (1985) study: pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of work, and communication. Table 1.1 contains brief descriptions of the nine subscales.

Table 1.1: JSS-Job Satisfaction Survey Subscales and Descriptions

Subscales	*Descriptions*
Pay	Pay and remuneration. Pay amount and fairness or equity of salary
Promotion	Promotion opportunities and fairness of promotions
Supervision	Immediate supervisor. Fairness and competence at managerial tasks by ones supervisor
Fringe Benefits	Monetary and nonmonetary fringe benefits, including insurance benefits, vacation and other fringe benefits
Contingent Rewards	Appreciation, recognition and rewards for good work. Sense of respect, recognition and appreciation
Operating Procedures	Operating policies and procedures, rules and perceived red tape
Coworkers	Perceived competence and pleasantness of one's colleagues
Nature of Work	Job tasks themselves, enjoyment of the actual tasks themselves
Communication	Communication within the organization, sharing of information

Spector,P.E.(1997). Job Satisfaction: Application, assessment, causes and consequences. Thousand Oaks, CA:Sage. Yelboga,A.(2009). Validity and Reliability of the Turkish version of the Job Satisfaction Survey (JSS). World Applied Sciences Journal, 6(8),1066-1072.

Other relevant terms alphabetically listed:

College or School: the college or school in which faculty members teach; examples include education, fine arts, engineering, business, and many others.

Distance Education: Distance education is planned learning that normally occurs in a different place from teaching and as a result requires special techniques of course design, special instructional techniques, special methods of communication by electronic and other technology, as well as special organizational and administrative arrangements (Moore, 1993, p.4).

Gender: the sex of an individual.

Online education: Online education is defined as that which offers the content online and interaction between instructor and student is mediated through the Internet or other forms of electronic or computer mediated communication, CMC. The participants in this study all used Blackboard Learn, a comprehensive learning management system designed to facilitate online learning through content presentation and course tools to promote interaction. Online education inherently incorporates the use of web-based technologies. The term web-based is sometimes used synonymously with online in the distance education research.

Southwestern university faculty member: any individual currently teaching an online class; this includes full professors, associate professors, assistant professors, lecturers, instructors, graduate or teaching assistants and adjunct professors.

1.7 Statistical Definitions

Sample Mean: For any population, with number N and individual samples x_i, the Sample Mean, μ is given by:

$$\mu = \frac{1}{N} \sum_{i}^{N} x_i \tag{1.1}$$

Sample Mean Standard Deviation : The response to the questions:

$$\sigma = \sqrt{\frac{1}{N}\sum_{i}^{N}(x_i - \mu)} \tag{1.2}$$

Factor Sample Mean STDEV: For a given factor F, have M multiple questions (indexed by j) for which the N survey respondants/ participant (indexed by i) provide responses given by x_{ij}, the factor response, $X_i(F)$ is given by:

$$X_i(F) = \sum_{j}^{M} x_{ij}(F) \tag{1.3}$$

with the factor mean, $\mu(F)$ given by:

$$\mu(F) = \frac{1}{N}\sum_{i}^{N} X_i(F) \tag{1.4}$$

For each factor, the sample standard deviation, σ_{FS} is given by:

$$\sigma_{FS} = \sqrt{\frac{1}{MN}\sum_{i}^{N}\Big(X_i(F) - \mu(F)\Big)} \tag{1.5}$$

Question Mean STDEV: the factor response, $X_j(F)$ is given by:

$$X_j(F) = \sum_{i}^{N} x_{ij}(F) \tag{1.6}$$

with the factor mean, $\mu(F)$ identical to the definition above and given by:

$$\mu(F) = \frac{1}{M}\sum_{j}^{M} X_j(F) = \frac{1}{N}\sum_{i}^{N} X_i(F) \tag{1.7}$$

For each factor, the question standard deviation, σ_{FQ} is given by:

$$\sigma_{FQ} = \sqrt{\frac{1}{MN}\sum_{j}^{M}\Big(X_j(F) - \mu(F)\Big)} \tag{1.8}$$

Alpha α: The standard expresion for the Alpha or sometimes known as the numerical coeficient for reliability is:

$$\alpha = \frac{N}{N-1}\left[1 - \frac{\sum_{j}^{M}\left(\frac{1}{MN}\sum_{j}^{M}\Big(X_j(F) - \mu(F)\Big)\right)}{\frac{1}{MN}\sum_{i}^{N}\Big(X_i(F) - \mu(F)\Big)}\right] = \frac{N}{N-1}\left[1 - \frac{\sigma_{FQ}^2}{\sigma_{FS}^2}\right] \quad (1.9)$$

1.8 Research Questions

The following are the two research questions in this study:

1. *Is there a statistically significant, positive, or negative relationship between faculty members who teach at least one course entirely online and their EI levels as indicated by results from the Trait Emotional Intelligence Questionnaire, short form (TEIQue-SF) and their job satisfaction scores as indicated by the results of the Job Satisfaction Survey, (JSS)?*

   Hypothesis = For online faculty, there is a positive relationship between their TEIQue-SF scores and their respective JSS scores.

2. *Is there a statistically significant positive or negative relationship between male and female faculty members in terms of EI scores and job satisfaction scores as demonstrated by the TEIQue-SF and JSS respectively?*

   Hypothesis = There is a positive relationship between the gender of online faculty members, their TEIQue-SF scores, and their job satisfaction levels and female faculty members will exhibit both higher EI scores and higher job satisfaction levels.

1.9 Identification of Variables

The purpose of this study was to ascertain if a statistically significant relationship could be found between emotional intelligence scores to online faculty job satisfaction levels. The variables of interest were TEIQue-SF scores and subscales, as perceived by the individual faculty member, gender of the online faculty and job satisfaction scores and subscales of the online faculty, as perceived by the JSS. Because this was a correlational study, which examined the relationship between variables, the variables were not manipulated and therefore were considered variables of interest (Howell, 2010).

Two surveys were used to acquire the necessary data from the online faculty. The Job Satisfaction Survey (JSS) measured the levels of job satisfaction each online faculty member was experiencing (Spector, 1985). To measure the emotional intelligence scores of online faculty, the TEIQue-SF (SF = short form) was utilized. Results of the factor location analyses in Petrides, Pita and Kokkinaki (2007) demonstrated that trait EI is a distinct (because it can be isolated in personality space) and compound (as it is partially determined by several personality dimensions) construct that resides in the lower levels of personality hierarchies. Demographic surveys were included with the faculty in order to obtain certain characteristics of the participants and effectively respond to one of the research questions.

1.10 Research Plan

Creswell (2002) stated, "Quantitative research will be used to study research problems requiring a description of trends or to test a theory regarding the relationship among variables" (p. 50). This research was not designed to prove a cause-and-effect relationship between the EI levels of online faculty members to job satisfaction lev-

els. Rather, this study sought to determine if a correlation existed between the two variables and if a relationship, positive or negative, existed between the gender of the online faculty member and his or her job satisfaction levels.

Correlational research methodology provided the foundation that guided this study (Gay, Mills, & Airasian, 2009) however, it was expanded to also include qualitative data and subsequent analysis. Correlation studies conduct research after the variations in the variable have occurred naturally (Simon, 2006). The variables in the current study were not manipulated or controlled; therefore, a correlation design was deemed appropriate for the quantitative portion of the study (Creswell, 2002).

An exploratory, open-ended question section at the beginning of the survey provided a rich layer of qualitative data for this study. The questions were designed to engage faculty in describing the differences in their feelings between teaching face-to-face versus teaching online, which they preferred and why. Finally, six demographic questions were asked at the end of the survey.

1.11 Limitations of this Study

The present study is limited by the following:

1. The present study was confined to online courses being offered by one Southwestern, publicly funded university. Therefore, the results may not generalize to other higher education settings such as private higher education institutions.

2. The survey instrument was emailed to potential respondents one time, with one reminder email sent out after two weeks but no follow-up interviews were conducted with respondents or non-respondents.

3. The conclusions based on the results of this study were dependent on the views

expressed by those who chose to respond to the survey. It is assumed that the respondents were willing to truthfully reveal attitudes and responses, which, from their perspectives, represented the best answers to the survey questions.

1.12 Summary

The purpose of this chapter was to serve as an introduction to the problem and to detail the background, purpose, and significance of the study. Relevant definitions were included along with a discussion of the limitations of the study. Chapter Two examines pertinent literature relevant to emotional intelligence, in particular, trait EI versus ability EI, job satisfaction, and gender differences in online learning environments. Chapter Three details the investigative techniques used to obtain data for the study, and Chapter Four presents the findings of the research. Chapter Five provides strengths and limitations, implications, a discussion of the results and recommendations for future research.

Chapter 2

LITERATURE REVIEW

2.1 Introduction

The purpose of this quantitative survey study was to determine whether a relationship existed between levels of emotional intelligence, (EI), in faculty members teaching online and their respective job satisfaction levels. The focus of this chapter was to provide information on previous research and theories related to this study. This included a discussion of key models of EI with a focus on the differences between an ability-EI approach versus a trait-EI perspective, job satisfaction, gender differences in online settings and the use of these variables in higher education settings.

2.1.1 EI versus IQ

As far back as 150 years ago when Sir Francis Galton first began his exploration to define intelligence, many psychologists, philosophers, and scientists have sought to further define what exactly is intelligence. The simplest approach or solution might be to accept E.G. Boring's definition that "intelligence is whatever intelligence tests measure" (Boring, 1923, p. 35). Broadly speaking, intelligence can be thought of as representing the capacity to carry out thought of an abstract nature, as well as the general ability to learn and then adapt to the environment (Sternberg, 1988; Detterman, 1983; Terman, 1921; Wechsler, 1997). British psychologist Charles E. Spearman (1863-1945) suggested two major forms of intelligence: a general intelligence (g) and specific intelligence (s). Spearman didn't know exactly what the general factor might be, but he proposed in 1927 that it might be something he labeled "mental energy" (Spearman, 1927). The simplicity, efficiency, and hierarchical nature of the IQ test has allowed this long-standing theory of intelligence to become entrenched in popular culture as well as in scientific literature (Weschler, 1997). However, many critics and advances in neuroscience and cross-cultural understanding have highlighted the inadequacy of the IQ test to validly describe a person's

intellectual potential (Gardner, 1983; Mercer; 1984; Block & Dworkin, 1976). The simplicity of IQ may be its greatest weakness in that IQ simply doesn't encompass enough of the myriad ways in which people measure, exhibit, or explain intelligence (Sternberg, 1997). L. L. Thurstone (1887-1955) considered Spearman's g-intelligence as lacking in fluidity and suggested seven "primary mental abilities" namely verbal comprehension, verbal fluency, numeracy, spatial visualization, inductive reasoning, memory, and perceptual speed (Thurstone, 1938). Thurstone's seminal work was essentially the first true entre into exploring intelligence in a way that was not first and foremost logical, sequential, and based almost exclusively on cognitive abilities.

Emotional intelligence originally was defined as a "subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990, p. 189). Over the last 25 years, EI has expanded to where now, there are two primary branches of EI, ability and trait as well as a mixed model branch often more associated with emotional quotient (EQ) and emotional competencies (EC), (Goleman, 1998). EI has become complex; therefore the historical context of postulatingEI and its evolution to where we are today is important to review.

2.2 Historical Context of EI

The origins of EI can be found in E. L. Thorndike's (1920) work on social intelligence, which refers to the ability to understand and manage people and to act wisely in human relations (Guilford, 1967). Social intelligence refers to a person's skills in social interaction and appreciating the inherent value in people. Compared to social intelligence, EI is broader in definition in that it encompasses internal, private emotions that focus on personal growth, as opposed to social growth (Mayer, Salovey, &

Caruso, 2000).

In 1973, David McClelland, a Harvard professor, management theorist and world-renowned psychologist challenged the gross over-use of IQ tests and the weight on cognitive intelligence (e.g., the SAT), to essentially decide who was accepted to top ranked colleges and graduate schools. McClelland claimed that relying so heavily on the IQ score of applicants to college was equivalent to stating, one will only teach tennis to people that are already good tennis players implying that we already know a segment of the population performs well in cognitive based -IQ testing platforms (McClelland, 1973). The real challenge is to expand beyond the scope of just general intelligence to encompass the myriad other ways which people learn and process knowledge and give equal value or weight to those intelligences (1973). McClelland showed that despite the advantages afforded effective IQ test takers, longitudinal studies proved that later in life, these people were no more successful than those who scored poorly on the SAT exams, thus further weakening the argument for a focus on IQ as the key barometer to success (1973).

Howard Gardner's (1983) theory of multiple intelligences, specifically, intrapersonal and interpersonal intelligence, reflected key EI concepts, and Yale psychologist Robert Sternberg (2000) further challenged the status quo on cognitive intelligence, hypothesizing that the link between cognitive tasks and psychometric test scores was weak at best (Sternberg, 2000). For purposes of his own research, Sternberg defined intelligence as "the ability to achieve one's goals in life, given one's sociocultural context; by capitalizing on strengths and correcting or compensating for weaknesses; in order to adapt to, share and select the environment; and through a combination of analytical, creative and practical abilities" (p. 34).

Similar to McClelland's earlier claims, Sternberg argued that previous, more linear notions and theories on how best to define intelligence supported individuals who are naturally strong in memory or analytical skills, at the expense of individuals who

express intelligence in more creative, less traditional ways (Sternberg, 1997). Sternberg added that the results of limiting the definition of what constitutes intelligence meant that individuals who may have talent to succeed in life may instead be labeled as unintelligent, as he once was, and others, gifted in the merits of standardized testing, may be viewed as cognitively intelligent but may suffer greatly in other arenas such as communication, creativity, team building, and interpersonal relationships (Sternberg, 1997).

Dan Goleman's 1995 bestseller, *Emotional intelligence: Why it can matter more than IQ*, was read by a young psychologist, Reuven Bar-On, who having just completed his dissertation on psychological well-being, quickly realized the potential of the EI concept and relabeled his measurement scales as *EQ-i*, a multidimensional questionnaire of EI (Bar-On, 1997). Bar-On took credit for coining the term, Emotional Quotient, to refer to the emotionally based form of intelligence (Bar-On, 1997a) yet there is undeniable controversy as to whether he should rightfully be afforded this claim.

Following Goleman's book, many measures theoretically dedicated to the construct of EI and EQ, were made public, including Goleman and Boyatzis' Emotional Competency Index (ECI; Sala, 2002), a proprietary instrument, developed with the Hay Group. Additional measures based on Mayer and Salovey's EI definition (1997) were created by Jordan, Ashkanasy & Hartel,(2002), Schutte, Malouff, Haggerty, Cooper & Golden (1998), and Wong and Law (2002). Schutte et al. (1998) went on to identify a strong link between EI and interpersonal relations and claimed that many of the qualities associated with facilitating successful relationships (e.g., empathetic perspective taking, self-monitoring, good social skills, cooperation) were related to high levels of EI (p. 534).

Starting in the late 1990's, Cooper and Sawaf (1997), began writing studies on EI which indicated that at times people who are intellectually and cognitively very

bright are often not the most successful, either in the business world or in their personal lives, again, promoting the idea that our reliance on cognitive intelligence has been too high. They wrote that "Modern science is proving every day that it is EI, not IQ or raw brain power alone, that underpins many of the best decisions, the most profitable and dynamic organizations, and the most satisfying and successful lives" (Cooper & Sawaf, 1997, p. xii).

Also in the mid-to-late 90's as EI's popularity really began to take hold and gain traction, Goleman wrote that EQ-based competencies were twice as important as cognitive ability and technical expertise, combined (Goleman, 1995). Goleman's statement was both bold to grasp and definitive, let alone test, about a then young and difficult concept of intelligence. In making this claim, he declared the emotionally based intelligence's place in academia, industrial, and popular culture and history.

A great deal of research now exists on EI, (Wechsler, 1940; Maslow, 1943; Maslow, 1954; Leeper, 1948; Bar- On, 1988; Goleman, 1995; Bar-On, 1997; Cooper & Sawaf, 1997; Goleman, 1998; Weisinger, 1998; Feldman, 1999; Cherniss & Adler, 2000; Boyatzis, Goleman, & Rhee, 2000; Goleman, Boyatzis, & McKee, 2001; Goleman, Boyatzis, & McKee, 2002, Petrides and Furnham, 2004), as well as some research on the relationship between EI and its effect on work outcomes, such as job satisfaction and job burnout (Brotheridge, 2006; Johnson & Spector, 2007; Totterdall & Holman, 2003), and there's research on students' experiences online and which academic subjects might lend themselves to a better online experience, thus a better student experience (Jaggars, 2012). Yet today, little research exists on EI and its relationship to faculty job satisfaction in an online learning environment (Erskine, 2012; Sander, 2011; Lambert et al., 2009; Mertz, 2003). As the growth in online environments continues to take hold, it's important that faculty members are equipped for the transition in every way, including emotionally. Thus, the need for this study.

2.3 Theoretical Background

Instructional design has always relied on several instructional theories and models, including behaviorism, cognitivism, humanism, constructivism, and social constructivism. Much of the attention in the last two decades - during the explosive growth of online learning - has shifted to constructivism and social constructivism because those theories help promote active learning through the construction of new knowledge (Gagne, Briggs, & Wager, 1992).

Social constructivism, an outgrowth of constructivist learning theory, defines learning as a negotiation of shared meaning through social interaction. Social constructivists understand that learning takes place in a community setting, where instructors and students interact to construct meaning (Snyder, 2009). Social constructivist's learning environments, both online and face-to-face, create opportunities for students and instructors to develop meaning by dialoguing, discussing, and debating with other learners. This social interaction creates meaning from current and prior knowledge, thus deepening understanding and extending knowledge for all involved. Learners are actively involved in constructing knowledge of a topic using communication and social interactions with peers (Conole, Dyke, Oliver, & Seale, 2004; Neo, 2005; Snyder, 2009). Constructivism and social constructivism in particular, play important roles for online learners as they adapt to a new learning setting by transferring key elements of proven knowledge from traditional face-to-face settings, to build on in a new, nontraditional, often times community-based and community-supported online environment.

Many followed Thorndike's early work in social intelligence, which focused on describing, defining, and assessing socially competent behavior (Chapin, 1942; Doll, 1935; Moss & Hunt, 1927). Edgar Doll developed the first instrument designed to measure socially intelligent behavior in young children (1935). David Weschler, most

likely influenced by Doll and Thorndike, included two subscales (comprehensive and picture arrangement) in his well-known test of cognitive intelligence, which appears to have been designed to measure qualities of social intelligence (Bar-On, 1988).

Abraham Maslow (1943, 1954, 1971) attempted to synthesize a large body of research related to human motivation. Maslow's hierarchy posits that human needs are based on two groupings: deficiency needs and growth needs. These levels are physiological, safety, belonging, esteem, cognitive, aesthetic and self-actualization (Maslow, 1943, pp. 371-379). According to Maslow, (1943, 1954, 1971) each lower need must be met before moving to the next higher level. Maslow's basic position was that as one becomes more self-actualized and later, self-transcendent was added, one develops wisdom and automatically knows what to do in a variety of situations. While Maslow's hierarchy has been challenged as being too focused on Western civilization and there is little empirical evidence to support the model, it's assumed that basic needs are in place, all the more reason that focus should be spent, whether it's designing a better online course or creating a new employee orientation program, on the higher levels of the model, in particular, in self-actualization. Self-actualization is about becoming all one can become and links to identifying key emotions in oneself and others, as they are experienced in various settings, including today's online learning environments.

Layering on Abraham Maslow's Hierarchy of Needs work but now in an online setting, Caroline Crawford's Distance Delivery Hierarchy of Needs created in 2005 (Figure 2.1), outlines a multi-level tool, which delineates the complex needs of the distance education (DE) learner (Crawford & Cook, 2008). Just as Maslow's first level addresses personal needs, such as food and shelter, Crawford's first level is about basic computer-mediated needs and other technological needs. Online learners and instructors must have certain tools in place and know how to utilize them; these tools include effective computer hardware and software, ability to maneuver through

web-based tools, and the ability to interact appropriately with peers, instructors, and others. Finally, online learners must feel competent, valued, and not inadequate or insecure about online abilities–or if they do feel inadequate, to know who will listen and lend an empathetic ear and how to reach out to that person and feel supported when they do (Crawford & Cook, 2008). Crawford's hierarchy set the foundation and the tone for acknowledging that EI plays a critical role in online learner and faculty success. Just as when one moves up in Maslow's hierarchy, when one moves up in Crawford's DE model, the focus shifts from tangible, concrete outcomes to nuance-based, emotionally driven outcomes employing effective tools to give online learners an outlet to express their emotions and ideally to receive nonthreatening feedback and increase self-esteem and self-efficacy in a new communication environment.

As cited in Hinshaw, Burden, and Shriner (2012), Bandura's social learning theory was seen as an approach to view learning as "being interactive and social in

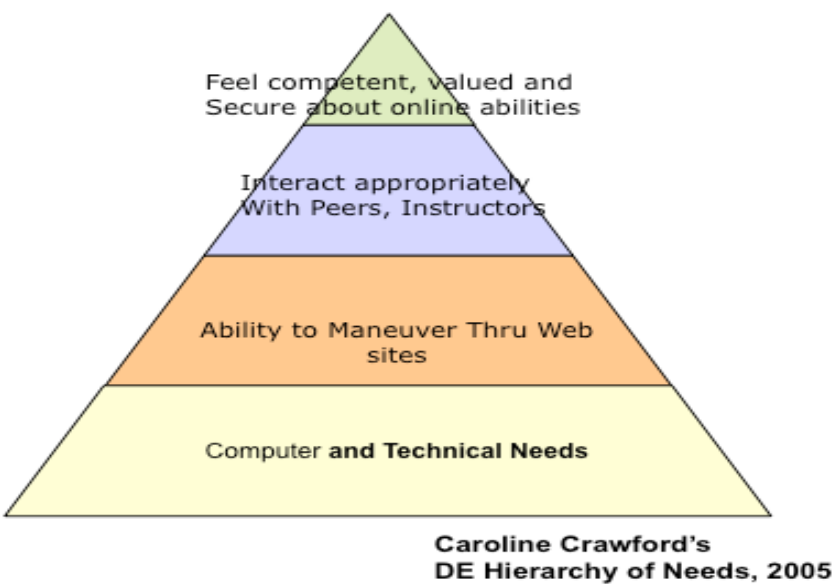

Figure 2.1: Caroline Crawford's Hierarchy of Needs, 2005.

nature with cognition as a key element" (p. 875). Bandura's attention, retention, reproduction, and motivation learning levels utilized the online learning environment to engage learners with the subject matter, to disseminate knowledge among peers, and to stimulate further development (Bandura, 1986). These approaches allowed instructors as well as students to plan their approach to the course, to assess personal achievements, and to reflect on challenges and successes as the online course progressed. Developing self-regulatory capabilities is an important aspect of academic success, referring to the degree to which "students are metacognitively, motivationally, and behaviorally active participants in their own learning process" (Zimmerman, 1990, p. 14); components of social learning theory also serve as fundamental qualities of EI, namely self-management and self-regulation. Figure 2.2 represents a model

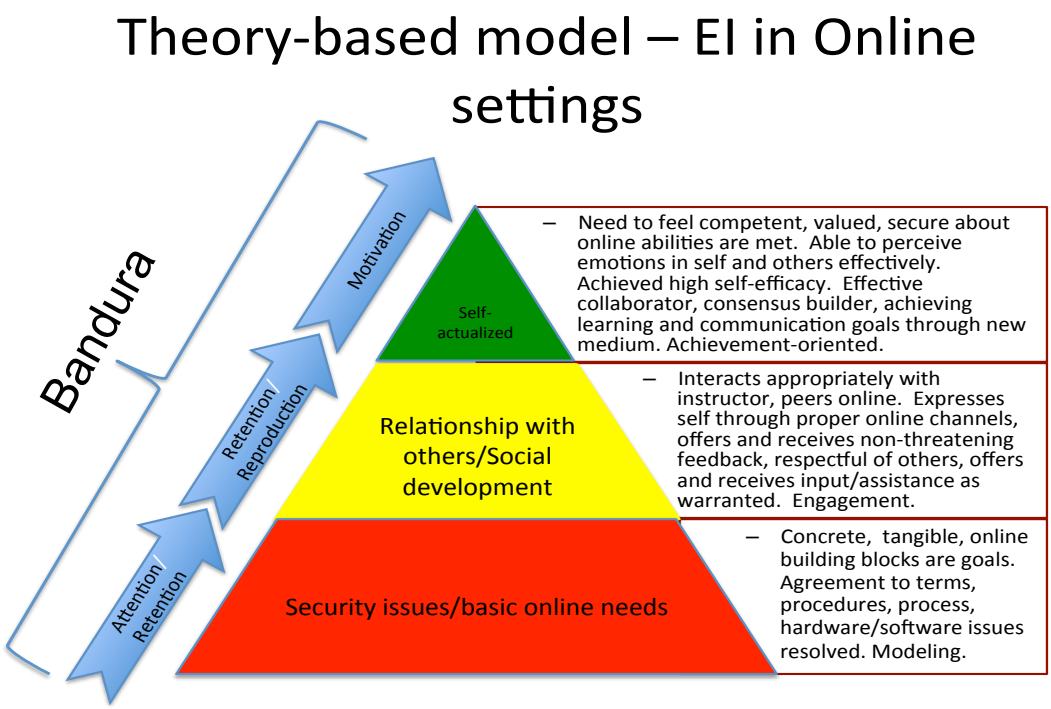

Figure 2.2: Theoretical Underpinnings to Study.

developed by the researcher which illustrates the theoretical influences, in particular, the work of Maslow, Bandura and Crawford underpinning this study.

2.4 Importance of EI

Moore and Kearsley (2011) studied communication problems that occur online and attributed these added challenges to transactional distance. When online students receive adequate attention through dialogue with the instructor, transactional distance can be minimized, and improved relations at many levels can exist and thrive (Moore, 1993). Effective use of EI constructs by instructors and students can assist in bridging the physical distance found in online environments. Yet, as a society, we continue to struggle with a gap between the increasing popularity of EI as a concept and its application in society as a whole (Lencioni, Bradbury & Greaves, 2009), including EI's application in the online learning environment. Understanding the role our emotions play in the decisions we make, as well as the emotions of others, fundamentally influences our lives every day and it's imperative that we increase our understanding here (2009). Goleman (1995) estimated that IQ contributes about 20 percent to an individual's success, whereas emotional and social skills contribute about 80 percent (p. 34). Some studies have found that the impact of social intelligence and EI is as powerful as that of technical skills for career success (Goleman, 1998). EI also has been associated with positive work outcomes and attitudes in employees (Lopes, Grewal, Kadis, Gall, & Salovey, 2006). And an increasing number of studies have examined the relationship between EI abilities and several important life criteria, such as emotional warmth, self-regulation, and individual motives, with most studies finding significant evidence of EI as an important predictor of real-life outcomes (Charbonneau & Nicol, 2002; Ciarrochi, Deane, & Anderson, 2002). Individuals with high emotional intelligence tend to have high

self-esteem, increased levels of self-acceptance, and overall higher levels of life satisfaction (Carmeli, Yikzhak-Halevy, & Weisberg, 2009, Bar-On, 2010). Research has also shown that not only can EI be learned, but it can also be retained over the long term (Boyatsis & McKee, 2002; Goleman, 1995; Groves, McEnrue, & Shen, 2008).

EI skills have been strongly associated with both effective leadership (Emmerling and Goleman 2005; Goleman 1998, 2000b; Goleman, Boyatzis and McKee 2002; Kerr, Garvin, Heaton, and Boyle 2006; Rosete and Ciarrochi 2005) and fulfilling personal life experiences (Goleman 1995; Marques 2006; Wing, Schutte and Byrne 2006). In addition, EI has been acknowledged as important for success in the workplace (Goleman 1998; Kirch, Tucker and Kirch 2001; Rozell, Pettijohn and Parker 2002), which has resulted in appeals for the incorporation of EI skills in higher education curricula (Chia 2005; Holt & Jones, 2005; Low and Nelson 2005).

2.5 EI Conceptual Frameworks

Generally speaking, the construct of EI presupposes that individuals differ in the extent to which they attend to, process, and utilize affect-laden information of an intrapersonal (e.g., managing one's own emotions) or interpersonal (e.g., managing others' emotions) nature (Petrides, 2009a). Put another way, emotional intelligence consists of the interaction between emotion and cognition, which leads to adaptive functioning (Salovey & Grewal, 2005). Thus far, however, no formal consensus exists among researchers regarding the definition of emotional intelligence (Zeidner et al., 2009). Some view EI from a narrow, focused perspective, (e.g., Salovey, Mayer, Goldman, Turvey, & Palfai, 1995), while others view EI more broadly, more generally, (e.g., Bar-On, 1997; Goleman, 1995; Petrides & Furnham, 2001). Petrides, Furnham and Marvroveli (2007) argued that regardless of the researcher, the key difference between trait EI and ability EI is in how each is measured, not in the theoretical

domains of how EI is conceptualized.

2.5.1 EI Theories and Models: Ability versus Trait

The ability model of EI emphasizes the relationship between emotion and intelligence, or cognition, whereas the mixed model (called mixed model because of the mixed qualities this model targets), and trait-based model, focuses on talents, mental abilities, and traits (Mayer, Salovey, & Caruso, 2004). In the ability model, EI is defined as a type of intelligence that focuses on aptitude for effectively processing EI (Hajj & Dagher, 2010). Ability EI represents a class of intelligence labeled 'hot intelligences,' which includes interpersonal, pragmatic, and personal intellect (Mayer & Mitchell, 1998; Mayer, Salovey & Caruso, 2008). Ability EI reflects an individual's aptitude for conceptualizing, processing, and adapting to emotional information, including understanding human relationships.

Previous research supports the premise that ability EI meets the three criteria of intelligence: conceptual, correlational, and developmental (Mayer, Salovey & Caruso, 2000). The conceptual criterion indicates the need for intelligence to represent mental performance versus mundane behavioral tendencies. The correlational criterion represents experimental principles that intelligence should be related to similar abilities, separate from previously established measures of intelligence. The developmental criterion reflects the idea that with age and experience, intelligence develops further (2000). Ability EI is measured by maximum performance measurement, correlates well with other intelligence tests, and reflects the developmental process. Ability-based EI appears to demonstrate construct validity (MacCann, Roberts, Matthews, & Zeidner, 2003). Finally, ability-based measures of EI are less susceptible to faking than other measures that are more transparent (Van Rooy & Viswesvaran, 2004) because it's not operationalized via self-reporting.

In trait-based models, EI is conceptualized as a diverse construct, which includes aspects of personality as well as the ability to perceive and understand emotions (Hajj & Dagher, 2010). In the trait model, emotion-related self-perceptions form four interrelated factors: well-being (traits pertaining to dispositional mood); self-control (traits pertaining to the regulation of emotions and impulses); emotionality (traits pertaining to the perception and expression of emotions); and sociability (traits pertaining to the interpersonal utilization and management of emotions) (Petrides, Pita, & Kokkinaki, 2007).

The trait EI framework aims to provide comprehensive coverage of personality facets relating to affect. A growing body of evidence supports the predictive validity of trait EI in different areas, including educational (Petrides, Frederickson, & Furnham, 2004), experimental (Austin, 2005) and organizational (Wong & Law, 2002) psychology. The trait-based model uses broad definitions of EI that include noncognitive capability, competency, or skill (Bar-On, 1997) and/or, emotionally and socially intelligent behavior (Bar-On, 2004, p. 122) and dispositions drawn from the personality domain (Petrides & Furnham, 2003).

Trait-based EI also is referred to as emotional self-efficacy (Perez, Petrides, & Furnham, 2005). Proponents of trait EI state that EI cannot be measured as a mental ability and hence cannot be tested via ability tests but can be tested only through self-reports (Petrides & Furnham, 2004). This is due to what Petrides and Furnham consider to be the subjective nature of emotions that cannot be artificially objectified or quantified to accommodate an IQ-type scoring mechanism, the type of instruments employed in ability-based EI tests (p. 11). According to Petrides and Furnham, trait EI is not expected to be correlated with cognitive intelligence because intelligence and personality are essentially independent domains (Petrides & Furnham, 2001). Table 2.1 details key differences between trait EI and ability EI and common instruments or measures associated with each.

Table 2.1: Trait EI versus Ability EI

Construct	*Measurement*	*Conceptualization*	*Expected Relationship to g*	*Construct validity evidence/Properties of measures*	*Measures*
Trait EI	Self-report	Personality trait	Orthogonal Unimportant for construct validity	Consistent with models of differential psychology Discriminant and incremental validity vis--vis personality Good concurrent and predictive validity with many criteria, Easy to administer Susceptible to faking, Standard scoring procedures, Good psychometric properties	TEIQue EQ-i SEIS
Ability EI	Maximum performance	Cognitive ability	Moderate to strong correlations	Inconsistent with models of differential psychology Limited concurrent and predictive validity, Lower than expected correlations with IQ measures, Difficult to administer, Resistant to faking, Atypical scoring procedures, Weak psychometric properties	MSCEIT TEMNIT STEU/ STEM

Adapted from The Psychologist, Emotional intelligence, Petrides, Furnham and Fredrickson argue for a trait approach to the misunderstood construct. Vol. 17, No.10, October 2004.

2.5.2 Criticisms of EI

Researchers argue that the term emotional intelligence is too ambiguous and is expected to cover too many constructs that may or may not be interrelated (Cherniss, 2010). Similarly, EI is thought to have too many definitions, without any agreed upon core definition (Cherniss, 2010). Daus and Ashkanasy (2005) argued that due to the existence of so many models, there is doubt about the true validity of the construct itself. However, Cherniss, Extein, Goleman & Weissberg (2006) argued that while there are a number of conflicting constructs, there is considerable overlap among constructs as well and that all the models, at their core, agree that EI entails being aware of and managing one's emotions and those of others (Cherniss et al., 2006). Similarly, Zeidner, Matthews and Roberts (2004), argued that much of the predictive validity of questionnaire measures of EI may be a product of their overlap

with standard personality factors. Emmerling and Goleman (2005) argued that while EI may be learned to some degree, without sustained effort and attention, people are unlikely to improve their emotional intelligence (Emmerling and Goleman, 2005, p.9).

According to retired professor and psychologist, E.A. Locke (2005), EI should not be thought of as a unique form of intelligence at all. Instead, Locke wrote that, what we hypothesize as EI is in fact cognitive intelligence being applied to emotions. He stated, "The definition of EI indicates that it is really some combination of assorted habits, skills and/or choices rather than an issue of intelligence" (Locke, 2005, p. 426).

2.5.3 Criticisms of Trait EI

Proponents of ability-based EI argue that trait-based EI models do not make clear distinction between personality and competency models and that has caused disruptions in the EI field (Van Rooy, Viswesvaran, & Pluta, 2005). Still others argue that trait EI is invalid due to a lack of evidence in scholarly literature, the lack of a clear definition or measurement of trait EI, and that the construct has no true, clear meaning arguing trait EI does not exist as a construct because it does not demonstrate validity over the Big Five personality traits or cognitive intelligence (Conte, 2005; Locke, 2005; Pahl, 2008; Antonakis 2003, 2004). For clarification, the Big Five are conscientiousness, agreeableness, neuroticism, openness, and extroversion. However, this criticism has been refuted by various studies that demonstrate the use of at least one key trait EI instrument, the TEIQue, exhibits incremental validity over measures of the Big Five and Giant Three personality constructs namely neuroticism, extroversion and psychoticism (Gardner & Qualter, 2010; Mikolajczak et al., 2007; Petrides et al., 2007).

Still other scholars argued the reliability and validity of trait EI is too low to merit consideration as a valid construct, again implying that results are due largely to personality factors above anything else (Antonakis, 2003, 2004; Conte, 2005; Locke, 2005; Mayer, Salovey, Caruso, & Sitarenios, 2001; Pfeiffer, 2001). Yet, Petrides and Furnham (2003), stated that discovering where trait EI belongs within established personality hierarchies matters more than investigating whether EI is related to existing personality traits.

2.5.4 Criticisms of Mixed Model EI

Many of the criticisms levied against the trait EI model, also get applied to the mixed EI model, namely Goleman and Boyatzis' ECI and Bar-On's EQi, among others, specifically, on the points on 'faking good' made by Paulhus and Vazire (2009). To reiterate their point, these authors stated that people are susceptible to answering self-report assessments in a socially desirable manner. In essence, this may serve to bias the results of the test, giving a score that is more a reflection of who the person wants to be rather than of who the person actually is.

2.5.5 Criticisms of Ability EI

Some researchers have found that the measurements from the ability model correlate well with verbal (crystallized) ability; hence, some have suggested that the term "emotional intelligence" should be replaced with "emotional knowledge" (Zeidner, Matthews, & Roberts, 2004). The greatest criticism of ability EI naturally stems from trait-based researchers, who point out that it's simply not possible to create EI items that are amenable to objective scoring and that also cover the domain of the construct comprehensively, indicating one cannot assess a subjective construct in an objective way (Petrides 2009b). For example, Petrides found that the entire

intrapersonal component of EI is impervious to maximum-performance measurement because the information required to score as dichotomous "correct or incorrect" responses to items such as, "I am aware of my emotions as I experience them," are available only to the person offering up the responses not to a third party (p. 11).

2.6 EI Instrument Review

By now, most researchers agree that Salovey and Mayer (1990), Goleman (1995), Bar-On (1997), and more recently, Petrides and Furnham (2001), have proposed respected and distinct models and definitions for EI that, despite significant criticisms, seem to be withstanding the test of time. While the theories of EI vary, distinct similarities exist in all theories, namely that EI incorporates certain basic elements, such as perceiving and managing emotions. Still, there are fundamental differences in the approaches and models of each.

2.6.1 Salovey and Mayer and the Four-Branch Model of EI

Based on the Four-Branch Model of EI, (Mayer, Salovey, & Caruso, 2000), this popular theory posits that EI involves the interrelated abilities of (a) perception of emotion in the self and others, (b) using emotion to facilitate decision making, (c) understanding emotion, and (d) regulating emotion in the self and others. By 2002, and after several revisions, Mayer and Salovey decided to label the first two branches of their model as *experiential* intelligences and the last two as *strategic* intelligences (Brackett & Salovey, 2006). The four branches or dimensions are: perceiving emotion, facilitating thought, understanding emotions, and managing emotions (Salovey & Grewal, 2005; Brackett & Salovey, 2006).

Table 2.2: Mayer, Caruso and Salovey, MSCEIT Instrument Components

Branch/Ability	*Skills Involved*
Perceiving emotions	The ability to identify emotions in thoughts The ability to identify emotions in others The ability to identify emotions in other stimuli, such as art, stories, and music The ability to convey emotions accurately The ability to differentiate between accurate and inaccurate feelings
Using emotions (to facilitate thought)	The ability to generate emotions to aid in cognitive processes The ability to use mood swings to change viewpoints The ability to use emotional states for the purpose of encouraging problem solving
Understand emotions	The ability to understand complex emotions The ability to understand relationships among emotions The ability to interpret the emotions conveyed The ability to recognize the transitions of emotions
Managing emotions	The ability to monitor emotions The ability to regulate emotions in oneself and in others The ability to determine whether an emotion is typical The ability to solve emotion-based problems

Adapted from: "Emotional Intelligence and Emotional Leadership," by D. R. Caruso, J. D. Mayer, and P. Salovey, 2002, Multiple Intelligences and Leadership. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Perceiving emotion is just that - the ability to recognize or perceive emotions in self and in others. Facilitating thought involves the utilization of recognized emotions in areas such as problem solving, reasoning, and creativity (Salovey et al., 2003). The third branch of EI, understanding emotion, describes the ability to understand the intensity and complexity in emotions, how they may be sequenced, such as being sad or angry, and what feelings they portray of that individual (Fatt & Howe, 2003).

Finally, the fourth branch, managing emotions, is defined as an individual's ability to help regulate his or hew own emotions (Salovey et al., 2003). Mayer & Salovey suggested that utilizing EI enables an individual to become flexible in planning for the future, to solve problems, to redirect emotions when needed, and to motivate individuals to accomplish challenging tasks (Brackett & Salovey, 2006).

Mayer et al. (2004) argued that EI is best conceived of as an ability, similar to cognitive intelligence. Mayer and Salovey defended their qualification of EI as a separate intelligence because it involves mental processes above and beyond those of an individual's personality or of a particular behavioral trait. In line with this conceptualization, they developed the Multifactor Emotional Intelligence Scale Test (Mayer, Caruso, & Salovey, 2000) and then its successor, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer, Salovey, Caruso, & Sitarenios, 2003; Brackett & Salovey, 2006), both of which are maximal performance tests modeled after traditional cognitive intelligence tests. Various authors have concluded that the four-branch model of EI is reasonably distinct from personality, indicating divergent validity (Brackett & Salovey, 2006; Ciarriochi, Chan, & Caputi, 2000; MacCann, Matthews, Zeidner, & Roberts, 2003; MacCann, Roberts, Matthews, & Zeidner, 2004; Zeidner, Matthews, & Roberts, 2009). Table 2.2 defines the branches contained in the MSCEIT instrument.

2.6.2 Mixed Models of EI

Mixed models are those that take aspects of ability EI and add in personality-type traits and behavioral preferences. For purposes of this literature review, two popular mixed models will be discussed - Bar-On's Emotional-Social Intelligence, and the work of Boyatzis and Goleman, specifically their Competency based EI models, ECI and ESCI. The Bar-On and ECI measures, in particular, include aspects of

personality and social competence that go well beyond the bounds of the original definitions given by Salovey and Mayer (1990) and Mayer and Salovey (1997).

2.6.3 Goleman and Boyatzis' Competency-Based Model of EI

In 1995, Dan Goleman wrote, "The art of relationships is, in large part, skill in managing the emotions in others, and the skills involved are the abilities that undergird popularity, leadership, and interpersonal effectiveness" (p.43). Goleman, known for his sometimes far reaching and all encompassing statements, added that people who excel in these skills do well at anything that relies on interacting smoothly with others; they are 'social stars' (Goleman, 1995). In 1998, he went on to declare that "For star performance in all jobs, in every field, emotional competence is twice as important as purely cognitive abilities, and for success at the highest levels, in leadership positions, emotional competence (intelligence) accounts for virtually the entire advantage" (p. 34).

Goleman expanded the Salovey and Mayer model by adding an individual's abilities and personality, hence earning the title "mixed methods approach" to EI (Goleman, 1995). Goleman is largely credited with popularizing the term *emotional intelligence*, although the original theory was authored by Salovey and Mayer (Goleman, 1998). Goleman defined EI as, "...one's ability to motivate oneself and persist in the face of frustration; to control impulse and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to empathize and hope" (p. 34). However, results of an analysis conducted by Boyatzis and Goleman in 2000, led to a reformulated model with the following definition of EI:

Emotional Intelligence is observed when a person demonstrates the competencies that constitute self-awareness, self-management, social awareness and social

> skills at appropriate times and ways in sufficient frequency to be effective in the situation.(Boyatzis et al., 2000, p. 3).

Goleman's model was initially five-dimensional, consisting of self-awareness, self-regulation, self-motivation, social awareness (empathy), and social skills. In 2001, he removed social skills from his model. Goleman specified that self-awareness is the ability to manage one's internal state and impulses. This competency incorporates self-control, trustworthiness, conscientiousness, adaptability, and achievement drive. Self-motivation is the ability to concentrate emotions on achieving and mastering goals. Social awareness or empathy involves understanding and reacting to other individuals' emotions, and social skills refers to being skilled at managing relationships (Goleman, 1998). These dimensions were included in two domains, which Goleman classified as *personal competence* and *social competence*. Personal competencies are identified as self-awareness, self-regulation, and motivation, whereas the social competencies are identified as empathy and social skills.

Unlike other researchers in this area, Goleman made a distinction between EI and emotional competence (EC), defining EC as a learned ability based on EI that leads to greater performance at work (Goleman, 1998). Goleman declared that individuals are capable of learning EC, as these competencies are not innate talents. EI is the underlying ability that affects one's potential for learning EC (Goleman, 1998). The true focus of Goleman's work is that of "emotional competencies," not emotional intelligence; therefore, his model departs somewhat from the Mayer and Salovey pure definition of EI as an intelligence (Kluemper, 2008).

Goleman's theoretical concept of EI has focused primarily on work performance and organizational leadership; however, these same concepts have also been applied to education implying that incorporating EI within the classroom will help all strengthen relationships with students of all ages (Goleman, 1998). Quarles and Cole (2011) suggested that teachers should, therefore be aware of their own EI to

help the emotional growth of their students as well as their own EI growth. Mortiboys (2012) argued that EI in the classroom should be given as much energy and focus as subject content and methods are given and similar to Quarles and Cole, educators should be more deliberate about applying and enhancing EI in themselves and in their students. And that rather than assuming EI is intuitive and comes naturally to all or at least some, educators need to be more deliberate about using EI and actually planning for and incorporating it into lessons (Mortiboys, 2012). Table 2.3 outlines the EI competencies contained in Goleman and Boyatzis' Competency Model of EI.

Table 2.3: The Competency Model of Emotional Intelligence

Competency	*Skills*
Emotional awareness (self-awareness)	Self-awareness Accurate self-awareness Self-confidence
Self-regulation (self-management)	Self-control Trustworthiness Conscientiousness Adaptability Innovation Achievement drive
Social awareness	Empathy Service organization Organizational awareness
Relationship management	Developing others Influence Communication Conflict management Leadership Change catalyst Building bonds Teamwork

Adapted from "An EI-Based Theory of Performance," D. Goleman, 2001. The Emotionally Intelligent Workplace, ed. C. Cherniss and D. Goleman (San Francisco, CA: Jossey-Bass). Copyright 2001 Jossey-Bass.

2.6.4 Bar-On's (1997) Mixed Model of Emotional and Social Intelligence

Bar-On first set out to develop a model that answered the question, "Why are some individuals more able to succeed in life than others?" (Mayer et al., 2000). He took the narrow definition or conceptualization of EI put forth by the ability model and expanded it by adding in various concepts related to personality, resulting in his mixed EI model.

Like Goleman, Bar-On's theory proposed that EI consists of emotional self awareness as well as skills or characteristics that may stem from the effective use of emotions, such as good interpersonal relationships, problem solving, and stress tolerance. In 2005, Bar-On's position on EI was that the current definitions were too narrow and that the wider, more general term, emotional-social intelligence (ESI), was far more accurate. Bar-On hypothesized that the integration of both emotional and social competencies provided individuals the ability to understand themselves and others (Bar-On, 2010). According to his model, emotional and social competencies determine how effectively individuals understand and express themselves, understand and relate to others, and cope with daily obstacles (Bar-On, 1997).

Also like Goleman, Bar-On (1997) outlined five dimensions of EI: intrapersonal, interpersonal, adaptability, stress management, and general mood. Just like it sounds, intrapersonal focuses on one's ability to be aware of one's self, to understand one's strengths and limitations, and to express emotions in a harmless way. The interpersonal dimension refers to the ability to be aware of the emotions and needs of others and to create and maintain positive relationships with others. The adaptability dimension involves the ability to manage change and solve problems. The stress management dimension refers to the ability to manage one's emotions effectively. Lastly, general mood refers to the ability to create a positive mood and

to motivate one's self. Bar-On (2000) proposed that components of emotional and social intelligence can be enhanced over time through training and development. Similar to Howard Gardner (1983), Bar-On focused on the intrapersonal and interpersonal abilities of individuals to comprise EI. As a result of this focus, Bar-On created the Emotional Quotient Inventory (EQ-*i*) to measure ESI, which measures an individual's ESI through self-reporting on the five composite scales (Bar-On, 1997). Petrides and Furnham (2000), argued that in using terms such as ability and intelligence throughout the Bar-On instrument, the questionnaire addresses dispositions and self-perceived abilities and taps into aspects of trait EI (p. 428). Table 2.4 details Bar-On's ESI domains and subdomains.

Table 2.4: Bar-On's (1997) Emotional Social Intelligence Domains and Subdomains

Domain	Description	Subdomains
Intrapersonal awareness	How well one views oneself and is aware of oneself, one's independence and assertiveness, and one's sense of self-actualization	Self-regard, emotional self-assertiveness, independence
Interpersonal	One's ability to empathize, sense of social responsibility, and ability to relate to others on a personal level	Empathy, social responsibility, interpersonal relationships
Stress management	One's stress tolerance and ability to control impulses	Stress tolerance, impulse control
Adaptability	One's ability to test one's sense of reality, one's flexibility, and one's sense of ability in problem solving	Reality testing, flexibility, problem solving
General mood	One's sense of happiness and optimism	Optimism, happiness

Adapted from: Reuven Bar-On, Bar-On Emotional Quotient Inventory (EQ-i), 1997.

2.6.5 Trait Emotional Intelligence Questionnaire, TEIQ

The trait model is considered the second generation of EI because it incorporated personal qualities that relate to affect (Cherniss, 2010). It is comprised of four components: well-being; which incorporates self-confidence, happiness, and optimism; sociability, which incorporates social competence, assertiveness, and emotional management of others; stress control - which incorporates stress management, emotional regulation, and low impulsiveness; and emotionality; which incorporates emotional perception of self and others, emotional expression, and empathy (Cherniss, 2010). Similar to Bar-On, Petrides and Furnham (2001) supported a trait-based theory of EI over the ability-based model originated by Salovey and Mayer (1990). Petrides and Furnham defined EI as, "A constellation of emotion-related dispositions and self-perceived abilities representing a distinct composite construct at the lower levels of hierarchical personality structures" (p. 12). In other words, trait EI refers to an individual's self-perceptions of their own emotional abilities (Petrides, 2009). This definition of EI encompasses behavioral dispositions and self perceived abilities and is measured by self-report, as opposed to the ability model, which refers to actual abilities, which have proven highly resistant to scientific measurement and is typically measured by others, not the individual in question (2009). Petrides and Furnham (2000 and 2001) argued that the operationalization of EI through maximum performance tests, or ability-based tests, will not produce the same findings as when EI is operationalized through self-report inventories and that individuals, not others, best know their own feelings and emotional levels.

The trait EI model is general in nature, rather than narrow and includes aspects of the Goleman and Bar-On models discussed above. As expected, Petrides et al., are major critics of the ability-based model and the MSCEIT arguing that they are based on "psychometrically meaningless" scoring procedures (Petrides, Furnham, & Marvroveli, 2007). The resulting model of trait EI is conceptualized as a part of the

personality framework and includes "all personality traits that are specifically related to affect" (Petrides, Pita, & Kokkinaki, 2007, p. 285). Specifically, analysis has revealed that the model is a distinct and compound personality trait at lower levels of personality trait taxonomies (Petrides et al., 2007). This makes it conceptually quite different from the ability EI model, an idea that is supported by a lack of significant correlations between the two models (Engelberg & Sjberg, 2004). Previous research found that individuals with high levels of trait EI are able to view life situations in a positive light, are skilled at building relationships and possess adaptive social skills, all of which may play a role in increasing positive feelings related to job satisfaction (Judge, T, 2009; Judge, T.A., et al, 2008; Judge, T.A, et al, 1998; Judge, T.A., & Bono, J. 2001; Judge, T.A., & Larsen, R, 2001, Judge, T.A, et al, 2001; Connolly & Viswesvaran, 2000, p. 266). Table 2.5 defines the 15 facets associated with measuring trait EI (Petrides, 2009).

2.7 Emotional Intelligence Measures

A key issue in the development of appropriate measures of EI is how the information is collected. Self-report surveys and 360-degree rater instruments are examples of EI instruments. Depending upon the approach–ability focused or trait focused–researchers have developed and utilized several EI instruments. Mayer and Salovey's (1997) ability model of EI measures EI with a test based on performance, with the primary instrument being the Mayer-Salovey-Caruso-EI Test (MSCEIT) (Mayer, Salovey, & Caruso, 2000). The popular EQ-*i* developed by Bar-On (1997) and the Emotional Competency Inventory 2 (ECI-2) developed by Boyatzis and Goleman (2000), and the more recent Emotional and Social Competence Inventory (ESCI; Boyatzis & Goleman, 2007), are examples of popular surveys intended to measure EI. The ECI-2 and the ESCI are multi-rater (360 degree) and outcome oriented and utilize data

Table 2.5: The Sampling Domain of Trait EI in Adults

Facets	*High scorers view themselves as...*
Adaptability	...flexible and willing to adapt to new conditions.
Assertiveness	...forthright, frank, and willing to stand up for their rights.
Emotion expression	...capable of communicating their feelings to others.
Emotion management (others)	...capable of influencing other peoples feelings.
Emotion perception (self and others)	...clear about their own and other peoples feelings.
Emotion regulation	...capable of controlling their emotions.
Impulsiveness (low)	...reflective and less likely to give in to their urges.
Relationships	...capable of maintaining fulfilling personal relationships.
Self-esteem	...successful and self-confident.
Self-motivation	...driven and unlikely to give up in the face of adversity.
Social awareness	...accomplished networkers with superior social skills.
Stress management	...capable of withstanding pressure and regulating stress.
Trait empathy	...capable of taking someone elses perspective.
Trait happiness	...cheerful and satisfied with their lives.
Trait optimism	...confident and likely to look on the bright side of life.

Adapted from, "Technical Manual for the Trait Emotional Intelligence Questionnaire (TEIQue, 1st ed.)" K. V. Petrides, 2009. London: London Psychometric Laboratory.

from self, boss, peer, and subordinates ratings on a variety of dimensions. Bar-On (1997) described the EQ-*i* as a self- report assessment of one's emotional competencies consisting of 133 "brief items." This instrument, which is process-oriented, relies on an individual's accurate own self-perception of emotions and feelings.

2.7.1 Trait EI Specific Measurements

In terms of measuring trait specific EI, many studies have found the TEIQue to be a superior measure to other trait EI assessments. In a meta-analysis of EI and health

(n=19, 815), Martins, Ramalho and Morin (2010) found that the TEIQue had the highest association with mental health (r=.50), compared to Bar-On's EQ-*i* (r=.44), the Schutte Emotional Intelligence Scale (SEIS; r=.29) and the Trait Meta-Mood Scale (TMMS; r=.24). Results from various studies measuring mental disorders were used as a measure of mental health.

Another study, which compared trait EI measures, showed that scores on the TEIQue, compared to the Schutte Emotional Intelligence Scale (SEIS) and the Multidimensional Emotional Intelligence Assessment (MEIA), were a superior predictor of eleven psychological criteria. These criteria were both negative and positive, including life satisfaction, alcohol abuse and other affect-related criteria (Gardner & Qualter, 2010).

The TEIQue is a valid measure of trait EI (Perez et al., 2005; Petrides et al., 2004), because the TEIQue has incremental validity over the Big Five personality traits (Petrides, 2009a), it has high scores on Cronbach's alpha, making it a scientifically valid and reliable instrument, and it also has demonstrated, predictive validity (Petrides, 2009a). One reason the TEIQue was chosen for this study was that some researchers argued it is the only measurement that measures all aspects of trait EI comprehensively (Austin, Parker, Petrides, & Saklofske, 2008). Although TEIQue may correlate with intelligence, it possesses a significantly stronger relationship to personality (Petrides & Furnham, 2001). Considering these factors and others, and because TEIQue explicitly measures a relationship facet (Petrides, 2009a), and links to creativity levels in individuals (Sanchez-Ruiz, Hernandez-Torrano, Batey & Petrides, 2011) which is central to effective teaching (Mortiboys, 2012; Powell & Kusuma-Powell, 2010), the researcher selected the TEIQue instrument as the measure of trait EI for use in this study. Table 2.6 outlines some of the most popular EI measurements used today.

Table 2.6: Commonly Used Measures of Emotional Intelligence

Measure	Theorist	Model of measure	Description
The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)	Mayer, Salovey, and Caruso	Performance-based	Certain tasks are used to measure each of the four branches of EI
The Emotional Quotient Inventory (EQ-I)	Bar-On	Self-report	A self-report survey consisting of 133 items is used to measure overall EQ, as well as each of the five dimensions of EI
Emotional and Social Competency Inventory (ESCI)	Goleman and Boyatzis	Self-report and other	A multirater instrument is utilized to rate a series of behaviors pertaining to EI and SI
The Schutte Self Report EI Test (SSEIT)	Schutte et al.	Self-report	A self-report inventory consisting of 153 items is used to measure EI using three aspects of EI, appraisal, regulations, and utilization of emotion
Trait EI Questionnaire (TEIQue)	Petrides, Pita, and Kokkinaki	Self-report	A self-report inventory consisting of 153 items is used to measure EI considering 15 distinct facets, four factors, and global trait EI
Wongs Emotional Intelligence Scale (WEIS)	Wong et al.	Self-report	A scale consisting of two parts is used to measure EI based on four ability dimensions. The first part requires respondents to select their likely reaction in 20 scenarios. The second part requires respondents to select one of two abilities that are best reflective of their strengths

Adapted from: Brackett M.A & Mayer, J.D (2003). Convergent, Discriminant,and Incremental Validity of Competing Models of Emotional Intelligence, Personality and Social Psychology Bulletin, September 2003, vol. 29, no. 9

2.8 EI in Higher Education

In recent years, EI has begun to emerge as a key instrument in correlational research in the field of higher education. EI and emotional competencies have been used in higher education organizations and other organizations to better understand success. Recent studies have examined EI in college presidents, the sample size of seven (n=7) was clearly a limiting factor however in this particular study (Niculescu-Mihai, 2008). Other EI researchers have examined graduate student success (Boyatzis, Stubbs, & Taylor, 2002; Jaeger, 2003) as well as effective teaching techniques (Haskett, 2003). Still additional researchers and scholars are applying EI concepts to faculty development and student advisement (Bennouna, 2004; Haskett, 2003; Mohamadkhani, 2010).

Milhoan (2007) conducted a study of community college department chairs to determine whether a relationship between their EI competencies and the faculty members perceptions of organizational climate had any correlation. Utilizing the Bar-On EQ*i* self-reporting measurement tool, results on 33 department chairs found that as their EI level increased, the faculty members perceptions of organizational climate decreased. In other words, improvements in EI levels of department heads did not positively correlate to their direct reports.

In 2005, Phillips investigated the EI scores of faculty teaching nontraditional students utilizing the abilities-based MSCEIT tool. The researcher used student evaluations of faculty course reviews to determine whether a correlation existed between EI characteristics and faculty scores. This was a mixed-methods study, with statistical analysis and personal interviews included. The 52 faculty from the single institution who chose to participate represented various disciplines. The end results showed no significant correlation between an end-of-course student survey and EI levels in faculty (Phillips, 2005).

Sander (2011), employing the TEIQue-short form (sf), found that a moderate positive correlation existed with online adjunct faculty members at two for-profit institutions between EI scores and job satisfaction, but with an N = 52 and an examination of only for-profit institution faculty, generalizability is in doubt.

Thus far, most of the sample sizes used in previous studies reviewing EI in higher education are relatively small (N <100), and the bulk were generated using samples based in for-profit institutions of higher education or community colleges (Phillips, 2005; Niculescu-Mihau, 2007; Milhoan, 2007; Sander, 2011), which impacted the significance and generalizability of the findings and a very small amount specifically examined faculty teaching in an online setting (Sander, 2011). As online learning continues to become a more popular delivery option in education, the need to examine the relationship between EI factors and online learning success - both for the faculty member teaching and the student being taught - increases in importance (Imel, 2003).

2.9 Emotions in Online Learning Environments

The arguments for and against online learning are plentiful. The Sloan Foundation's 2010 study on the status of online learning found that students in online courses fared better than those receiving face-to-face instruction (Allen & Seaman, 2010). The difference had to do with online students' ability to work at their own pace. The same report found that face-to-face formats were more popular for courses in a student's major where interactions with instructors or other peers were seen as important (Allen & Seaman, 2010). And from the same report, when a student considered a subject area "difficult"many cited mathematics and science courses as examples - they were more likely to want a traditional brick-and-mortar setting because, the report says, they needed the immediate question-and-answer context of a face-to-face course.

Emotionally based human characteristics that have been linked to online success include persistence, internal locus of control or self-management, self-efficacy, and ability to direct one's own learning (Howland & Moore, 2002; Fisher & Baird, 2005; Perez, 2006; Holcomb, King & Brown, 2004; Irizarry, 2002; Kemp, 2002; Parker, 2003). These emotional predictors of online success correspond with factors that comprise elements of EI, such as self-awareness, self-management, and relationships with others (Goleman, 1995).

During the last decade, emotion as a construct has emerged as a vital element of the learning process, but many questions remain about emotion in education (Pekrun, 2006). Steiner (2003) suggested that to be emotionally literate, we need to know what it is we are feeling and what the causes of our feelings are. One would expect, therefore, that the interaction of emotion and cognition would give rise to emotional intelligence, EI (Mayer, Salovey, & Caruso, 2000) and the increased need to examine EI and its impact in educational outcomes is at an acute level today.

Research has identified both classes of emotion (trait and ability) and specific discrete emotions as predictive of student academic outcomes with a range of student populations (Ainley, 2006; Goetz et al., 2012; Linnenbrick-Garcia, Rogat, & Koskey, 2011). Today, what remains unknown is whether the predictors and outcomes associated with academic emotions in online settings are similar to or different from traditional classroom settings. And, if similar research outcomes could apply equally well to online faculty as well as to face-to-face faculty members as few studies have focused on the emotional needs of the online instructor, thus, the purpose of this study.

From their 2006 study of online students, Stodel, Thompson, and MacDonald (2006) found that learning to be an online learner (i.e., being self-directed and autonomous) was an important criterion for online students at every level, including graduate students. Online learners were insecure about their learning in the ab-

sence of regular contact with instructors and worried about "missing something." Stodel et al. (2006) reported that interaction was very important to learners in their study. When learners reflected on what was missing from online learning, they included "perceiving and being perceived by others as well as getting to know other" as aspects of face-to-face learning that were missed or lacking in e-settings (p. 5). These findings highlight that from the learners' perspective, interaction, communication, and having feelings acknowledged are important components in online learning, critical tools that the successful online faculty member should strive to employ.

2.9.1 The Brain and Emotions in an Online Environment

Unlike face-to-face encounters, where senders and receivers have the luxury of the senses, shifting communication and learning online taxes humans in unique and challenging ways, ways we are still yet discovering. In online settings, many factors we take for granted in face-to-face settings, factors used to engage others and assess the status of our relationships, are challenged because we usually lack visual cues to frame the discussions and reactions to them, similar to email conversations (Clark & Mayer, 2002; Chang & Smith, 2006; Perez, 2011; Zembylas, 2008).

In Goleman's 2011 book, *The Brain and EI: New Insights*, he wrote that, "When we're physically with another person, able to see and hear them, our social brain, that part of the brain that is designed to attune to and interact with another person's brain, is firing millions of neurons through a complicated circuitry to constantly, send and react to subtle signals or messages. The social brain, is designed for face-to-face interactions, it's designed to give and receive immediate feedback, it's not designed for communication in the online world" (p.58). Self-regulation of emotion, one of the key facets of EI, relies greatly on the interaction between the prefrontal cortex - the brain's executive center - and the emotional centers in the midbrain, particularly

circuitry converging on the amygdala, essentially the regions that comprise the social brain (Goleman, 2011).

The amygdala is best known for signaling humans that danger is eminent and acts as the brains' radar for threat (LeDoux, 1998). The amygdala is a trigger point for emotional distress, anger, impulse and fear (Goleman, 2011). There's ample evidence indicating the amygdala's ability to pick up on social signals in animals and humans, such as direct eye gaze and the ability to distinguish between threatening and docile-looking faces (Young, et al., 1996). While the prefrontal cortex, guides us when we are at our best, the dorsolateral zone of the prefrontal area is charged with cognitive control, regulating attention, decision-making, voluntary action, reasoning and flexibility in response (Goleman, 2011). The feelings exhibited by online learners, whether positive or negative, tend to be magnified due to the lack of non-verbal cues and isolation of an online course (Zembylas, 2008.). Flaming, or cyber-disinhibition, essentially overreacting to an email or discussion post, is an example of an amygdala "hijacking" where the amygdala overreacts to the lack of visual cues thus disconnecting the amygdala from the usual management by the more reasonable prefrontal areas of the brain (Goleman, 2011).

The neural dynamic behind flaming is that the social brain has no feedback loop online: unless participants online are in a real time face-to-face teleconference or video chat, the social circuitry of the human brain has no input and is essentially operating blindly (Goleman, 2011). The social brain is what makes interactions go smoothly in face-to-face interactions. That part of our brain however, is crippled online (p.59). Interestingly, when online, there is a sort of optical illusion in the mind where we assume that all of the emotional signals one is feeling (as senders), feelings and emotions we can easily convey when face-to-face, also go out with our online message. Alas, nothing could be further from the truth.

To compound the dilemma, Goleman added that there is an actual negative bias

to email or other electronic posts where senders think that a message was sent with a positive tone, but is actually received neutral at best and often times, received negatively (2011). Again, this is due to the fact that online, receivers cannot pick up on any of the emotional signals a sender works to transmit along with their message (p. 59). It's therefore an unconscious assumption on the part of the sender that the receiver understands the feelings or emotions that were sent with the message, but unless the sender and receiver know one another very well, no such transmission of feelings to support the message was relayed (2011). Goleman stressed that in order to lessen the impact of the social brain being powerless online, when possible, designers and online instructors need to tap into online tools that allow some level of visual connection between receivers and senders (p.62). The more the social brain can engage and participate in online settings, the better the emotional and overall online communication outcome will be.

2.10 Gender Differences in Online Environments

Today, distance learning is experienced through computer-mediated communication (CMC) via the Internet (Prasad & Lewis, 2008). The body of literature for online learning grows rapidly as educational institutions expand their offerings of online courses and programs and as advances in computer and web technology provide new ways to communicate and collaborate online. While online learning holds great promise, few institutions have addressed the key issues necessary to provide effective and long-lasting implementation and even fewer are tackling the complicated issue of gender differences or of gender inequality in face-to-face settings, let alone in an online setting.

The most obvious features of face-to-face communication that are lacking in online communication include physical presence, which provides social context cues such as

non-verbal signals (eye contact, facial expressions, gestures); para-verbal cues (voice inflection, volume, rate of speech); and even interpersonal cues (age, gender, physical appearance), are lacking or entirely absent in an online environment. When learners and instructors can't see or hear each other, it means they cannot exchange many of the tacit signals that play a critical role in resolving ambiguities and making social connections (Zembylas, 2008).

Generally speaking, females tend to favor an online learning environment more than males and also tend to perform better than men (Brenner, 2012; French & Richardson, 2005; Chyung, 2001; Gunn, McSporran, Macleod, & French, 2003; Price, 2006; Rovai & Baker, 2005; Sullivan, 2001; Taplin & Jegede, 2001). Not surprisingly, more females than males take courses online (Kramarae, 2003; Rickert & Sacharow, 2000; Price, 2006). Research conducted by McSporran and Young (2001) found that the females who participated in their sample were more motivated, more adept at communicating online, and more effective in scheduling their online learning.

Crocco, Cramer, and Meier (2008), argued that the move toward more web-based communication has had an equalizing effect on gendered technology use. Males in their study, accessed fewer course website pages and few discussions forum posts; had poorer time management skills and tended to be overconfident in terms of their ability to complete learning tasks and assignments. Herring (2004) pointed to females' being able to have their say in an online environment without risk of being cut off or shut out of active roles by dominant males in face-to-face settings (2004). Yet females are still disproportionality the targets of online harassment (Herring et al, 1995; Harding, 2007) and threatening communication directed toward females speaking up on social media continues to deter their participation in online environments (Marwick, 2013). The sometimes-contentious tone of male online messages tends to discourage females from participating, while females concerns with relationship building and politeness tends to be perceived as a 'waste of bandwidth' by some

males (Herring, 1999, 2004, 2010). Males on the other hand, just as in face-to-face settings, tend to be fact oriented, use more controlling language, ask more rhetorical questions, go 'off script' more in online learning settings as they attempt to establish online dominance (Savicky, Foster & Kelley, 2006; Blum, 1999; Herring, 1999, 2004; Guadagno & Cialdini, 2002).

Online environments can create a feeling of anonymity, thereby reducing an individual's inhibition about participating in discussions (Alonzo & Aiken, 2004). Females can choose to present themselves, in an effort to minimize harassment or dismissal, by adopting a gender-neutral name (Bruckman, 1993; Sullivan, 2002). Herring argued, however, that this attempt to equalize the playing field has not been successful as each of us 'give off' information about our gender unconsciously in interactions and that this information does not depend in any crucial way on visual or auditory channels of communication, that text alone is sufficient (Herring, 1999, 2008; Snider & Borel, 2004; Sussman & Tyson, 2000; Wood & Stagner, 1994).

From a student perspective, females are more likely to complete an online course than males (Fisher, 2003; McSporran & Young, 2001; Young, Dewstow, & McSporran, 1999), and the demographics for online learning reveal that younger females, under 20, and older females, over 40, are more likely to turn to online courses than intermediate-aged females (French & Richardson, 2005). Females also tend to perform better online than males, meaning they receive higher grades (Gunn, et al 2003). These differences in performance suggest that some aspects of an online environment may be beneficial to females. It seems probable that there is a correlation between aspects of an online environment that improve a female's course performance as well as motivates her to complete the course and remain engaged in an online learning environment.

Both males and females have reported a greater sense of control in online learning environments (Guadagno & Cialdini, 2002). A greater sense of control has been

associated with higher levels of perceived learning and deep learning (Bar-On, 2010). Voices that may not emerge in a face-to-face regulated classroom due to gender-based role socialization, cultural differences, or individual traits such as shyness are 'heard' better in online courses where students are required to post analytical viewpoints on topical readings (Gunn et al, 2003). Self-regulated learning is now a proven feature of many online courses, in particular asynchronous ones, and female students have a stronger association with self-regulated learning than do males (Bidjerano, 2005). Historically, males have gravitated to technology at a faster rate than females (Cooper & Weaver, 2003), to the point where some females have avoided technology as best they can. Drawing from Crawford's DE Hierarchy of Needs model, online instructors should not assume that certain technology skills are in place for all students equally, males or females. Instructors and designers of online courses should offer online tutorials that ensure a solid foundation of basic hardware and software skills are first in place for every student, regardless of gender.

2.10.1 Myth of Gender Power Equalization Online

By now, it's been well established that males tend to dominate classroom discussions in face-to-face settings (Blum, 1999). To date, most researchers agree that female language tends to be less powerful than males and that females use linguistic strategies such as indirectness, taciturnity, silence, and tag questions (Tannen, 1994) far more often than men. Males tend to use coarser and more abusive language, strong assertions, self-promotion, put-downs, and challenges to others (Herring & Paolillo, 2006; Pedersen & Macafee, 2007), while females (in face-to-face settings) apologize more often, speak far less than males, and are verbally dominant only when males of an equal status or lower are present, rarely interrupt, and infrequently use assertions (Vermillion, 2006). Unfortunately, the research indicates that little has changed, in moving communication to an online environment, regarding the gender

power struggle. Early researchers thought a switch to online would allow greater communicative equality between genders, compared to face-to-face communication, because many aspects of power and dominance, long considered prevalent concerns between the sexes, are not present or at least are greatly diminished when online (Kiesler & Sproull, 1992; Spears & Lea, 1994). However, these results have been inconclusive at best. Herring & Zelenkauskaite, (2008) indicated that the evidence points to the persistence in gender disparity in online contexts, according to the same hierarchy that privileges males over females offline. That is to say, online environments reflect the same gendered identities and practices found in face-to-face environments, denouncing claims that online would provide an environment free of the power structures found in face-to-face interactions (Herring, 2004; Herring & Paolillo, 2006).

2.10.2 Gender and EI

The perception that, "IQ is male and EQ is female," is not consistent with the data (Petrides, 2009). In fact, males score higher than females on global trait EI (p. 17). In repeated face-to-face studies in North America, using the Bar-On EI model, Bar-On found that females are more aware of emotions than males while males are more adept at managing emotions than females (Bar-On, 2006). This is consistent with Petrides findings across many studies that males score considerably higher on 'emotion regulation' and 'stress management' and lower on 'relationships' and empathy (Petrides, 2009). Additional findings revealed that older people are more emotionally and socially intelligent than younger people, adding value to the concept that EI can be learned (Bar-On, 2006). More specifically, studies using the Bar-On model revealed that females tend to be more aware of emotions, demonstrate more empathy, relate better interpersonally, and are more socially responsible than males (Bar-On, 2006).

Still other studies found mixed results as to whether males and females tend to differ in their degree of EI. In a 2003 study of managers, Mandell and Pherwani found that females scored higher than males in EI (Mandell & Pherwani, 2003). In a 2006 study of 167 male and female employees utilizing the TEIQue, Petrides and Furnham found that high trait EI levels had a significant positive effect on perceived job control for both males and females. In addition, overall findings showed a strong correlation between Trait EI and Organizational Commitment levels (OC) was stronger in males than in the female sample (Petrides & Furnham, 2006). These findings supported earlier causal research linking job satisfaction with OC (Gaertner, 1999).

2.11 Job Satisfaction

Historically, one of the best-known theories of job satisfaction is that of Herzberg, Mausner, and Snyderman (1967). Herzberg et al. (1967) argued that job satisfaction and dissatisfaction depend on substantially different sets of work-related conditions and are therefore influenced by different factors. Herzberg et al's. two-factor theory, labeled as hygiene and motivator factors, led to widespread enthusiasm for job enrichment programs and a greater emphasis on personal and team-based recognition. However, later studies in the 1970's failed to provide evidence in support of the two-factor theory and reviewers became critical of Herzberg's methods, conclusions, and lack of account for individual differences (Locke, 1976). Continued research failed to provide support for the theory or replicate Herzberg's findings (e.g. Hulin, 1971).

Since then, the definition of job satisfaction has evolved over time, but most versions share the common belief that job satisfaction is a work-related positive affective reaction. There seems to be less consistency when talking about the causes of job satisfaction. Tillman and Tillman (2008) identified job satisfaction as the like or dislike of the job in response to pay, promotion, recognition, or other factors deemed

important by the worker. Spector (1985) defined job satisfaction as essentially how people feel about their job and about the different facets of their job. Though these definitions vary in some aspects of the content, most would agree job satisfaction is an emotional response to one's job, either in part or as a whole.

A recent study by the Conference Board (2013) reported that 47.3 percent of Americans in 2013 were satisfied with their jobs, down from 61 percent when the survey began in 1987. Since 2006, job satisfaction of employed Americans, in all industries, including higher education, has declined steadily to today's record low number (Liu, 2013). The leadership of post-secondary institutions should note the overall decrease, as satisfaction of faculty regarding their academic employment could have considerable impact on the quality of their teaching (Gappa, 2000).

Job satisfaction is indeed a concern to managers, supervisors, and HR administrators across all industries, including higher education (Balzer et al., 2000). The benefit of higher levels of job satisfaction is not limited to satisfied customers and a more profitable or successful institution. We've known for 15 years or more that there is also a benefit to the employee when there is a strong, positive relationship between job satisfaction and personal, professional, and material success (Lore, 1998). Benefits of satisfaction can include greater productivity, brighter outlook, acting as a positive role model for co-workers and family, better sense of humor, more enjoyment of leisure time, better health, and enhanced relationships (Lore, 1998).

Findings related to EI and organizational behaviors suggest that EI strengthens positive work attitudes, altruistic behavior (Carmelli, 2009) and organizational commitment (Nikolaou & Tsaousis, 2002) and affects how people handle threats to job security (Jordan et al, 2002). Evidence supporting a positive relationship between emotional intelligence and effective customer relationships has been found in organizational studies, particularly among workers who have the most contact with customers (Mayer et al, 2004) (Froman, 2010).

2.11.1 Online Faculty and Job Satisfaction

"The ultimate success or failure of the distance education enterprise is inextricably tied to the enthusiasm and continued support of the faculty" (Sherron, 1998, p. 44). The literature remains deficient on the discussion of factors affecting job satisfaction of those who teach exclusively online (MacLean, 2006).

MacLean (2006) examined stress and job satisfaction levels of distance education faculty who taught only online. The results indicated that the biggest stressors for these faculty were underprepared students, too much emphasis on student evaluations, and general workload levels. Regarding the variable of job satisfaction, MacLean, (2006), found that these faculty members were generally positive about their work and enjoyed their work. Similarly, Conceiciao, (2006), conducted a phenomenological study to understand the experiences of a sample of college faculty who teach exclusively online. The key themes that emerged from this study revolved around work intensity levels and expected rewards. Further analysis of the faculty found that while faculty were generally satisfied with the online teaching experience, the sheer amount of work was "intense" and some were challenged by what they called the "nonstop" nature of teaching online (Conceicao, 2006).

Bollinger and Wasilik (2009) reported similar findings in their study on faculty satisfaction. A sample of 102 online instructors completed the Online Faculty Satisfaction Survey, which was developed to gauge faculty satisfaction levels related to issues involving students, instructors, and the institution. However, more than 50% of the respondents indicated the workload was greater when teaching online than face-to-face (Bollinger & Wasilik, 2009).

Cook, Ley, Crawford, & Warner (2009), analyzed motivators and inhibitors of faculty teaching online. They framed their research based on Maslow's Hierarchy of Needs. Their findings indicated that there is a positive correlation between the

faculty that scored at the top of Maslow's hierarchy and those that rated themselves as having a high level of motivation to teach online, rather than face-to-face with students. In a series of studies over several years, results from their earlier studies found a strong desire to "assist students" was sufficient motivation to participate in online learning environments, but more recent study findings found that while this motivation remains relatively strong, extrinsic motivators, such as salary, workload and technology support are fast becoming more critical predictors of faculty's desire to participate in online teaching (2009).

Academic programs have begun to focus considerable attention on the customer and customer satisfaction (Slaughter & Rhoades, 2004), and faculty members are critical to ensuring student satisfaction. If faculty (at all levels) are satisfied with their job, it stands to reason that students also will be more satisfied with the academic experience. If faculty operating in an online environment are dissatisfied in certain areas, then determining what factors play into job satisfaction could lead to improvements and innovations in teaching that would help retain them, improve their morale and levels of engagement, and most likely reverberate down to the student (Okpara, Squillance, & Erondu, 2005, p. 178). Research in this area has shown that a lack of proper orientation can affect faculty satisfaction levels (Balch, 1999; Finucane & Algren, 1997; Rifkin, 1998). Being distant from campus "demands that faculty . . . be intrinsically motivated and independent" (MacLean, 2006, p. 24). All the more reason that additional research in this area is warranted and timely.

2.11.2 EI and Job Satisfaction

Many researchers have found a link between job satisfaction and emotional intelligence (Carmeli, 2003; Mustafa, 2011; Petrides, 2009). In a study on the EI levels of leaders and their followers in China, Wong and Law (2002), developed a short,

validated measure of EI, which assesses the four aspects laid out in Mayer and Salovey's (1997) definition, namely (1) appraisal and expression of one's own emotions, (2) the appraisal and recognition of emotions in others, (3) regulation of one's own emotions and (4) the use of emotion to facilitate performance. They also included the aspect of emotional labor in their study as a moderator of the EI-job satisfaction relationship. Emotional labor is defined by them as, "emotion-related job requirements imposed by organizations" (p. 244). Results showed that the EI scores of followers/subordinates significantly correlated with both job performance and job satisfaction. In addition, the EI scores of leaders were also found to be related to job satisfaction.

In a follow-up study, Downey (2008) used the EI tool developed by Wong and Law (2002), to determine whether EI was related to job satisfaction among administrators in America. Results showed that higher job satisfaction scores were related to elevated EI scores (with p values between .05 and .01). Specifically, seven emotionally related variables were examined in relation to job satisfaction: (1) measures of emotional labor, (2) awareness of one's own emotions, (3) awareness of the emotions of others, (4) ability to regulate emotions, (5) tendency to use emotions, (6) state affect (mood) and (7) trait affect (emotional disposition). A regression analysis showed that 15 percent of the variance in job satisfaction was predicted by these variables, with state affect showing the greatest influence (2008).

There is a gap in the research on how, if at all, individual levels of EI impact online faculty members and their job satisfaction levels. Given the current growth rate of online learning, it's imperative that with each new study, we advance the ways in which we better understand the emotional needs of today's online faculty so that they personally enjoy their role as much as possible as well as deliver exceptional learning experiences to students.

2.12 Measurement of Job Satisfaction

Measuring job satisfaction is difficult, for it is an abstract, personal cognition that exists only in an individual's mind. To measure job satisfaction, one must have a conceptual understanding of the construct in order to decide which indirect factors to measure. Because there is no single agreed-upon definition of job satisfaction, and no widely accepted theory to explain it, it is no surprise that there is also no general consensus about the best way to measure job satisfaction (Wanous & Lawler, 1972). The most basic forms of measurement might include an interview, a single-item measure, or a workplace observation. However, most researchers opt for a more objective and in-depth survey instrument (Spector, 1997). Survey questionnaires are easily distributed, have less room for bias, have increased likelihood of confidentiality, and require much less time and money than one-on-one interviews (Pedhazur & Schmelkin, 1991). Job satisfaction questionnaires also can examine any number of facets that have a hypothesized impact on job satisfaction, although the lack of common agreement with definition and theory can present challenges when weighting each facet and interpreting the results (Van Saane, et al, 2003). The most widely cited survey instruments found in the literature include the Job Satisfaction Survey (JSS), the Job Descriptive Index (JDI), and the Minnesota Satisfaction Questionnaire (MSQ).

2.13 Instrument Chosen: Job Satisfaction Survey

The JSS was developed by Paul E. Spector in 1985 to assess employee attitudes about the job and aspects of the job. The JSS is a 36-item questionnaire that targets nine facets of job satisfaction: pay, promotion, benefits, supervision, contingent rewards, operating procedures, coworkers, nature of work, and communication. Each

facet is assessed with four items, and a total score is computed from all 36 items. Responses to each question range from "strongly disagree" to "strongly agree." In this study, the JSS was selected as the demonstrated, validated instrument to test job satisfaction levels. In order to equalize the number of responses between the TEIQue-SF and the JSS, a neutral response was added to the JSS, moving it to seven possible responses from six, identical to the TEIQue-SF.

2.14 Summary

Chapter Two provided a summary of the relevant literature related to the roles of EI, faculty teaching online, and job satisfaction. It is clear that EI has expanded in recent years and become a popular area of research among the human resources and psychology disciplines (Cherniss, 2010). This is due to the early work of Salovey and Mayer (1990), who first introduced a model and definition of EI into the peer-reviewed literature. Subsequently, Goleman's (1995) bestselling book did much to propel the concept into the mainstream. Suddenly, emotional intelligence was the buzzword in a range of fields, most especially in organizations, and a renewed attempt was made to define and measure the construct (Bar-On, 2000).

Four main models were discussed in this section of the literature review. Two of these are mixed models: (1) Goleman and Boyatzis theory of emotional and social competencies, and (2) Bar-On's emotional-social intelligence. The third is the ability EI model which conceptualizes EI as a form of cognitive intelligence. The last, and most recent model is known as trait EI or trait emotional self-efficacy, and hypothesizes that EI is related to the personality framework.

The literature review served as the foundation for this study, which focused on the relationships between EI and job satisfaction, faculty EI levels and gender differences related to EI and job satisfaction of faculty in online settings. Chapter Three outlines

the proposed research methods for this study.

Chapter 3

METHODOLOGY

3.1 Introduction

This chapter describes the research methodology used to guide the study. Sections include the purpose and justification of the study, research design, sample and participant selection, instruments, procedure, research questions and hypothesis, data collection and analysis procedures.

The purpose of this quantitative correlational study was to investigate the relationship between trait EI to job satisfaction of faculty teaching online. The results of investigating the relationship between EI and faculty job satisfaction scores will benefit institutions of higher education on several levels, including improved online faculty hiring and training practices, improved faculty support, and ideally, improved student satisfaction.

3.2 Justification of the Theory of Trait Emotional Intelligence

The trait model of EI has been the subject of much research and constroversy over the past decade (Kluemper, 2008; Mikolajczak, et al., 2007; Petrides, 2009). It was first put forward by K. V. "Dino" Petrides in 2001 as part of his dissertation study. Petrides, together with Adrian Furnham, drew up an exhaustive list of dispositions and traits, before statistically analyzing these and reducing them to the fifteen constructs used today (Petrides & Furnham, 2001, Appendix A). The resultant model is shown to be a distinct trait that is related to personality measures such as the Big Five and Giant Three frameworks (Petrides et al., 2007). When selecting a model of EI for this study, the trait model was chosen for a number of reasons:

1. It is the subject of multiple years of research by a number of different researchers, within a number of different countries, across a wide cross-section of industries.

2. The TEIQue has consistent, high scores on Cronbach's alpha contributing to it being considered a scientifically reliable and valid instrument (Petrides, 2009a).

3. Petrides, the original author, has made the instrument, the TEIQ, available to researchers free of charge provided it's used to advance research and done within academic settings. A great deal of previously conducted research data, using the TEIQ in both long and short formats, is available online for validation and comparative purposes.

4. Some researchers argue that the TIEQue is the only measurement that measures all aspects of trait EI comprehensively (Austin, Parker, Petrides, & Saklofske, 2008).

5. The ability EI approach is thought to be unsuitable, due to the many criticisms laid out in Chapter Two of this study including most ability EI instruments rely on multi-rater or 'other' rater scores and input instead of self-only rating. In addition, the maximal performance measure of ability EI attempts to score results based on "expert" opinions - this does not seem like an accurate way to measure EI, in line with the criticisms of MacCann et al. (2003).

3.3 Basis for Quantitative Design

As stated in Chapter One, a quantitative design was chosen for this dissertation. This methodology was selected based on the aims of the study and the format of past research studies on trait EI (Petrides, 2001; Petrides, 2009). The survey instruments

applied to this study collected the data in a numerical format, and thus were ideally suited to statistical analysis.

3.4 Research Design

The present study was descriptive as these studies, also called correlational or observational, do not make any manipulations to the environment and simply provide associations between relationships ("Descriptive Studies", n.d.). According to Leedy and Ormrod (2005), correlational studies help a researcher determine whether a relationship exists between variables and/or whether one variable influences another. For purposes of the study, the researcher used a correlational design to examine whether a relationship existed between an online faculty member's EI levels and their job satisfaction scores.

Data was collected through several open-ended questions at the beginning of the survey. Themes from the data provided valuable information about specific feelings and insights of the online faculty. Analysis of this data added to the validity and strength of the research results.

3.5 Instruments

The purpose of this study was to ascertain if there was a relationship between EI levels of faculty members teaching online and their respective job satisfaction levels. In this study, variables included EI levels of faculty that teach online, the gender of the faculty and faculty job satisfaction levels.

Two surveys, an EI survey and a job satisfaction survey were used to acquire the necessary data for the investigation. Demographic data was also obtained from the

faculty respondents. The demographic data was germane to the researcher's research questions and hypotheses. The data collected from the surveys was used to test the hypotheses.

The Trait Emotional Intelligence Questionnaire (TEIQue), originally developed by Dr. K.V., "Dino" Petrides, is a psychometrically sound measure of the trait EI construct, and generally merits consideration as the best measure of trait EI available today (Petrides, 2009a, 2009b). The full version of the instrument contains 153 items, which respondents rate on a 7-point Likert scale, ranging from disagree completely to agree completely, including a neutral position (Petrides, 2009a).

Through the 153 items on the TEIQue, the instrument determines a respondent's scores on the 15 facets of trait EI, which includes adaptability, assertiveness, emotion regulation, impulsiveness (low), relationships, self-esteem, self-motivation, social awareness, stress management, trait empathy, trait happiness, and trait optimism (Petrides, 2001, 2009a, 2009b).

The TEIQue has demonstrated an internal consistency of .90 for the global trait EI score (Petrides & Furnham, 2006). The TEIQue has other types of validity as well, these include temporal stability (Petrides, 2009a, 2009b), convergent, discriminant, criterion, and construct validity, concurrent and predictive validity (Gardner & Qualter, 2010; and Petrides, 2009a, 2009b), and incremental validity over the Big Five personality traits (Freudenthaler et al., 2008; Petrides, Pita, & Kokkinaki, 2007).

A recent study in Germany conducted by Freudenthaler, Neubauer, Gabler and Scherl (2008), found moderate to strong correlations with all subscales of the trait EI inventories using the TEIQue (p.675), and Cooper and Petrides (2010), found in two additional studies, that the TEIQue-SF can be recommended and utilized when a rapid assessment of trait EI is needed (Cooper & Petrides, 2010). The shorter

30-item version of the TEIOue, the TEIQue-SF was selected for this study to collect data from online faculty about their EI levels. The short form was adapted by the original authors to include two questions from each of the 15 subscales found in the long version. The TEIQue-SF consists of 30 questions using a seven -point Likert scale (ranging from completely disagree to completely agree). The internal consistency of the TEIQue-SF has been reported as .88 (Petrides & Furnham, 2006).

The other main variable in the study was the job satisfaction levels of online faculty members. The Job Satisfaction Survey (JSS) (Spector, 1994) was used to measure job satisfaction of all the participating online faculty members. The survey measures employees on nine scales: pay, promotion, supervision, fringe benefits, contingent awards, operating conditions, coworkers, nature of work, and communication (Spector, 1994). Based on earlier research results, the overall reliability of the JSS is $\alpha = .91$. Reliability subscales ranged from .60 to .82. The internal consistency reliabilities for the nine components of the JSS are as follows: pay, $\alpha = .75$; promotion, $\alpha = .73$; supervision, $\alpha = .82$; fringe benefits, $\alpha = .73$; contingent rewards, $\alpha = .76$; operating procedures, $\alpha = .62$; coworkers, $\alpha = .60$; nature of work, $\alpha = .78$; and communication, $\alpha = .71$ (Spector, 1985). The JSS was chosen for this study for its acceptable levels of reliability, validity, and internal consistency. The JSS was also chosen for its norms of use by educators of all levels, including higher education ($n = 9,507$).

In an effort to reduce respondent errors and because the JSS uses a 6-point Likert scale and the TEIQue, a 7-point scale, the researcher added one neutral point to the JSS scale to equalize both instruments as the instruments were rolled out to the online faculty as if they were one, single instrument. These tools were selected among many options largely due to their academic validity as well as their availability to academic researchers at no cost.

3.6 Sample Selection

This single-site study sought to determine the relationship between trait EI levels in faculty members that teach online and their own job satisfaction levels scores.

3.7 Faculty Participants

Participants in the study were online faculty members at a research-based institution of higher education, centrally located in a SW state of the United States. The target population were the 265 individual instructors that taught at least one of the over 980 online sections of courses offered (both undergraduate and graduate level) in the spring 2014 semester. All 265-faculty members were invited to participate in the study.

To control for potential Type I and Type II errors, a two-tailed significant test, a medium effect size, an alpha level set at .05, and a sample size of not less than 38 faculty participants was obtained in order to ensure a statistical power of .95 (Cohen, 1988).

Qualification for participation in the study consisted of being a faculty member of the selected university hired to teach at least one section of an online course. Titles representing the make-up of the respective faculty who qualified with this definition included: instructor, lecturer, graduate assistant or teaching assistant, adjunct faculty member, assistant professor, associate professor and full professor (personal interview with D. Knotts, November 2013).

Courses are taught online at this particular university from all divisions and colleges with the exception of the law school, school of pharmacy and most departments of the medical school (Knotts, 2013). As part of the initial training to teach in this

format, all faculty members teaching in an online format are invited to complete an online orientation program (D. Knotts, 2013). Some online faculty members that participated in the study were new to an online learning format, while others had been teaching this way for a decade or more (D.Knotts, 2013). A letter summarizing the purpose of the study was sent out from the researcher with the support of the director of New Media and Extended Learning, (NMEL), encouraging the online faculty to participate in the study. In addition to the letter, the participants were provided with a direct link to an online electronic survey provider web page, where they engaged in the study and completed the TEIQ-SF and the JSS. All participants were made aware that they could stop the process at any point.

A demographic survey was added to the online survey addressing many identifiers including: level or title in the university system, if faculty also taught face-to-face or only online, department, length of time teaching online, age, gender, and ethnicity was collected. The data obtained from the demographic portion of the survey insured that only faculty members that met the qualifications were accepted to participate in the study. Data collected from the demographic survey also helped answer one of the researchers' hypotheses about gender differences and job satisfaction levels in faculty teaching online.

In order to encourage higher faculty participation rates, participants were offered a chance to participate in a raffle for a gift certificate to a local restaurant.

3.8 Procedures

Once approval was received from the researcher's dissertation Chair and committee, the correct forms were filed with the university's Institutional Review Board (IRB). The IRB ensured that the research being conducted and the data being collected meet the standards for ethical behavior in research and that the research

participants were protected. Permission to use the TEIQue-SF was granted through email communication with the original author Dr. Petrides (Appendix B). Permission to use the JSS was granted through email with the original author, Dr. Paul Spector (Appendix C). Upon final approval from the IRB (Appendix D), all targeted faculty were sent a letter from the researcher explaining the goals of the study along with an additional letter of introduction from the director of the online learning division of the university adding her support of the study and requesting faculty participation (Appendices E and F). Included in the email to faculty was a secure one-time usage survey link for each faculty member, ensuring anonymity to all participants. The electronic survey was hosted and administered by Opinio. For all online faculty participants, the electronic survey consisted of the TEIQue-SF (Petrides & Furnham, 2009), the JSS (Spector, 1994), a demographic survey and exploratory open-ended survey questions.

A reminder email with the link to the online survey was sent (Appendix G) after the survey had been open for two weeks. This email encouraged participants who had not yet taken the survey to participate and that the survey would close at the end of the month. In order to be entered into the drawing for the gift certificate, each participant that completed the respective survey was asked to send a separate email to an unbiased third party,an honest broker, who agreed to collect the emails to be entered into the drawing (Appendix H).

Initial data was stored on a secured server, then downloaded to a password protected storage device belonging to the researcher. Data was deleted from the server once the researcher successfully downloaded the data. The researcher stripped away any identifying data and coded the data in a manner that does not allow for participant identification. The removable storage device is being kept in a fire safe lock box for seven years accessible only to the researcher.

Survey data for the sample was exported to Statistical Package for the Social

Sciences (SPSS) program, version 21.0, results are reported in Chapter Four.

3.9 Research Questions

The following are the two research questions in this study:

1. *Is there a statistically significant, positive, or negative relationship between, the EI levels of faculty members who teach at least one course entirely online, (as indicated by results from the TEIQue-SF), and their job satisfaction scores as indicated by the results of the JSS?*

   $Hypothesis =$ There is a positive relationship between online faculty, their TEIQue-SF scores and their respective JSS scores.

2. *Is there a statistically significant positive or negative relationship between male and female online faculty members in terms of respective EI scores and job satisfaction scores as demonstrated by the TEIQue-SF and JSS respectively?*

   $Hypothesis =$ There is a positive relationship between the gender of online faculty members, their TEIQue-SF scores, and their job satisfaction levels.

3.9.1 The nature of Likert scales

All variables within this study were measured by Likert scale items. This response format is highly popular in the psychometric field, and is most commonly used to measure attitudes and self-perceptions (Jamieson, 2004). There are various benefits and limitations to consider when making use of Likert scale tests. Some benefits, according to Albaum (1997) include:

Ease of test construction: Likert scale items are relatively easy to create and structure into a psychometric assessment.

Ease of administration: This format is easily understandable, and responses are quicker compared to other test formats.

Ease of scoring and interpretation: This form of assessment is simple to score, sum into scales and interpret.

Shows direction and intensity: Likert items are designed to provide an indication of direction of feelings ("agree" vs. "disagree"), as well as intensity ("somewhat" vs. "strongly"), thus eliciting more detailed responses.

Unique insight into an individual's subjective perceptions: Given the simplicity of the format, it is the preferred test format when attempting to delve into an individual's subjective feelings on a particular subject.

There are two main types of bias that are commonly linked to Likert type assessments (Paulhus & Vazire, 2009):

1. Social desirability: This form of bias is arguably the most common, and refers to the tendency to "distort self-report measures in a favorable direction" (Furnham, 1986, p. 385). This distortion may occur because of dishonesty (portraying oneself as something one is not), lack of self-insight (agreement for agreement's sake), misunderstanding (not being comfortable with the language used in the test, or not understanding how to respond), exaggeration (embellishing one's good points), impression management (wanting to be liked or selected for a job) or an honest response (the individual really does feel in the extreme).

2. Central tendency: This refers to the reluctance of some respondents to mark items in the extreme (Albaum, 1997). It may also indicate an individual who

prefers to answer each item as consistently neutral, or indifference on the part of the respondent (Hollingworth, 1910).

While all measurement instruments have some shortcomings, for consistency purposes as well as the points illustrated above, the researcher opted to use the Likert scale of measurement for the two instruments in this study.

3.10 Data Collection and Analysis

The goal of this study was to examine the relationship between EI levels of faculty teaching in an online learning environment and their respective job satisfaction levels and to test the hypothesis that female faculty would exhibit higher EI levels and higher job satisfaction scores than their male counterparts. The TEIQ-SF and the JSS were administered to measure the participants EI and job satisfaction levels, respectively. Use of the TEIQ-SF did not require special permission, however the researcher communicated with the original author, Dr. Petrides as a subject matter expert and in the email transmissions, he granted the researcher full use of the TEIQue, in either format (Appendix B). The JSS also did not require special permission as long as it was used for educational or research purposes, provided the results of the study were shared with the original author (Spector, 1997), but the researcher chose to contact the original JSS author to confirm permission to use the instrument and permission was granted (Appendix C).

The data was collected using an online electronic survey provider, supported by the university. Participants were directed to complete the TEIQ-SF and the JSS online. A password-protected server was used to maintain the confidentiality of the data for all completed assessments.

SPSS v. 21 and STATA 13 were used to run assumption tests and correlational

analyses. These procedures were utilized in order to find correlation coefficients to measure the strength and direction of the relationship between the variables of EI levels in online faculty and faculty job satisfaction levels. Correlation tests were conducted to ascertain the positive or negative relationship between the variables in research questions one and two and test the null hypotheses. The results from the correlation coefficient demonstrate the degree and direction of the relationship between the variables (Gay, Mills, & Airasian, 2006). Pearson Correlation Coefficients (r) were also used to demonstrate the effect size or strength of the relationships.

All downloaded data was kept on a password-protected external hard drive maintained by the researcher. The data was exported from the online electronic survey provider into SPSS, in order to analyze the data. The strength of the linear relationship between the EI (global score) of faculty teaching online and their job satisfaction levels was also analyzed using Pearson's r linear correlation.

3.11 Summary

This study intended to add to the existing body of literature on the correlation between online faculty member's EI levels and job satisfaction levels. The methods used to carry out a correlational study were defined, a description of the participants was presented, methods of gathering data were described, instrumentation was discussed, explanation of research procedures was given, and data analysis was explained. Analysis of the actual data is discussed at length in Chapter Four.

Chapter 4

RESULTS

4.1 Introduction

The purpose of this survey-based study was to determine whether a positive relationship existed between emotional intelligence, (EI), levels in faculty members teaching online, and their job satisfaction levels and to test the hypothesis that female faculty would exhibit higher EI levels and higher job satisfaction scores than their male counterparts. This chapter provides descriptive results through a discussion of the data collection process, sample statistics and demographic findings, internal reliability, and finally, the analyzed results, both quantitative and qualitative in nature. Implications of these findings are discussed in Chapter Five. Microsoft Excel 2011 for Mac, STATA 13 and Statistical Statistics for the Social Sciences, SPSS v. 21, were used for all descriptive, assumptive and correlational analyses. All correlational analyses were set at a 95% ($p = > 0.05$) level of significance.

4.1.1 Results of Pilot Study

In the researcher's 2012 study (Cooley, 2012) of EI levels in students taking an online class, significant differences were seen between males and females, t = 2.55, df = 40, $p < 0.01$ in their perception of assessing emotions in online learning settings. Results indicated that females had a statistically significantly higher mean average in their perceived emotions (M = 2.66, SD =0.77) than males (M = 1.75, SD = 0.98). Cohen's d for this comparison was $d = 1.65$. Table 4.1 provides a summary of these results.

With an N of 41, and only six males, caution should be used in interpreting too much from these results and yet, these results were the impetus behind the current larger study (Cooley, 2012).

Table 4.1: Means and Standard Errors of Male and Female

	Perceived Emotions
Female	2.66 (0.14)
Male	1.75 (0.33)

Note. $N = 41$

4.2 Data Collection Process

After receiving approval from the Institutional Review Board (Appendix D), the researcher informed the director of New Media and Extended Learning, NMEL, that the study had been approved and was available through Opinio to the 265 institutional faculty members who taught at least one online course at this particular Southwestern university during the spring 2014 semester. The criterion to be eligible to participate in this study was that the faculty member had to be teaching at least one course online, the course could be at the undergraduate or graduate level, at the Southwestern university. The invitation to participate in the survey was sent only to the faculty teaching at least one online course in the spring of 2014 ($N = 265$) (Appendix F). In sending the letter in week five of the 16-week semester, it was expected that first-time online faculty would have had enough time to become familiar with the online tools and other unique qualities subject to an online learning environment, thus ensuring their ability to authentically respond to the survey questions regarding their emotions and job satisfaction levels experienced while working online.

Consistent with the methodology discussed in Chapter Three, a letter describing the survey hosted on Opinio then was attached to the email invitation from the NMEL director and emailed to all faculty who teach online. The email went out on February 11, 2014, (Appendix E), during the fifth week of the 16-week semester. Each participant was told that it would take approximately 20 minutes to complete the survey. A reminder invitation was sent out two weeks later, on February 25,

2014, (Appendix G) encouraging faculty members who had yet to take the survey, to please take it and thanking the ones who had taken it. No further reminders were issued. The survey remained open and available to the online faculty for a total of 18 days and closed on March 1, 2014.

As a token of appreciation for participating in the study, IRB authorized the researcher, by way of an honest broker, (a third party who agreed to receive emails from the faculty thus ensuring the researcher would not have access to who the participants were), to conduct a drawing for a $100.00 gift certificate to a local restaurant. Upon completing the survey, participants were instructed to contact the honest broker if they wished to be in the drawing for the certificate. Additionally, the researcher indicated that anyone wanting a copy of the findings could let the honest broker know that and a summary would be sent to them later in the year. After the survey closed, the researcher reviewed the raw data in Excel, reverse-scored 33 of the Likert items and exported the data to SPSS where data analysis was conducted. The survey results will remain password protected in Opinio and in the researcher's computer for at least one year.

4.3 Sample Statistics and Demographic Findings

Of the 265 possible survey participants, a total of 72 (27%) of faculty who taught at least one class online in the spring 2014 semester attempted and completed the survey. Four of the 72 neglected to press the finish button upon completing their survey, but their data was still collected, and therefore their answers were added to the overall total. Tables 4.2 and 4.3 detail the demographic findings of the participants. The participants consisted of 62% or 45 females and 38% or 27 males. Caucasians made up the majority of the participants (75%) with Hispanics comprising 13% of respondents, Asians, 3%, American Indian, 2% and, Other, 6%.

Table 4.2: Demographic Information of Participants

Gender		n	%
Female		45	62%
Male		27	38%
Other		-	-
Ethnicity	Females	Males	%
Caucasian	36	18	75%
Hispanic	5	4	13%
Asian	1	1	3%
American Indian	1	-	2%
Other	1	4	7%
Not answered	-	-	-
Age (by groups)	Females	Males	%
Younger than 25	1	-	2%
25-34	8	3	15%
35-44	9	3	17%
45-49	6	3	13%
50-54	6	5	15%
55-64	12	6	25%
65+	3	5	11%
Prefer not to disclose	-	2	3%

2014 survey results of faculty that taught online, spring 2014

Results indicated that this was the first time teaching in an online environment for 18 (25%) of the participants; 32 (44%) participants had taught between one and three years in an online format; six (8%) between four and six years; four (6%), between seven and nine years; and 12 (17%) had taught 10 or more years in an online format. Fifty of the participants, or 69% of the responding faculty, also taught at least one course concurrently in a face-to-face setting in the same semester, while 22 (31%) taught in an online environment only during the spring 2014 semester.

Table 4.3: College and Rank Information of Participants

Discipline/Affiliation	Females	Males	%
College of Arts and Sciences	22	11	47%
Anderson School of Management	3	1	6%
College of Education	8	3	15%
School of Engineering	-	5	7%
School of Medicine	1	2	4%
College of Fine Arts	5	1	8%
University College	1	1	3%
University Libraries	2	3	7%
Prefer not to disclose	2	-	3%
Rank	Females	Males	%
Professor	1	5	8%
Associate professor	5	4	13%
Assistant professor	4	2	8%
Lecturer	9	6	21%
Instructor	1	2	4%
Grad asst./teaching asst.	15	1	22%
Adjunct	10	7	24%
Years of Online Teaching Exp.	Females	Males	%
First year experience online	12	6	25%
1-3 years experience online	24	8	44%
4-6 years experience online	3	3	8%
7-9 years experience online	1	3	6%
10+ years experience online	5	7	17%

2014 Survey results faculty that teach online, spring 2014

4.4 Internal Reliability

In this study, the Cronbach's alpha coefficient was .91 for the 36 job-specific items. The Cronbach's alpha coefficient was .83 for the 30 EI-specific items. An overall Cronbach's alpha coefficient was .91 for all 66 combined questions on the survey. EI was measured using the TEIQue-SF (Petrides & Furnham, 2006), which is a shorter version of the 153-item TEIQue (Petrides & Furnham, 2003). The TEIQue has an internal validity of .90 for the global trait, or overall EI score (Petrides & Furnham,

2006). Petrides created the short form by including two questions from each of the 15 subscales found in the long form (Petrides, 2009). The Cronbach alpha coefficient of the TEIQue-SF has been reported as .88 with factor-specific Cronbach alpha levels ranging from $\alpha = .71$ for emotionality to $\alpha = .83$ for well-being (Petrides, 2009). Eight questions on the TEIQue-SF tied to the emotionality factor, with six questions each respectively related to self-control, sociability and well-being for a total of 26 items. The remaining four items are added in when calculating a Global Trait score (Petrides, 2009).

Job satisfaction was measured using the JSS (Spector, 1994). According to the JSS website, as of July 2011, the JSS has been normed by 40,618 participants within a variety of industries and occupational fields (Spector, 2011). The Cronbach's alpha coefficient was reported to be .91, with subscale Cronbach alpha levels ranging from a low of $\alpha = .60$ for coworkers and nature of work to a high of $\alpha = .82$ for supervision (Spector, 1997). Four items each on the Job Satisfaction Survey tie into each of the nine subscales for a total of 36.

4.5 Data Analysis and Results

This study measured trait EI and its relationship to job satisfaction levels in faculty who teach in an online environment. The online survey, hosted through Opinio, consisted of seven open-ended questions at the beginning of the survey, 66 Likert-type questions with a seven-point scale ranging from Completely Disagree ($score = 1.0$) to Completely Agree ($score = 7.0$) and one final open-ended question at the end of the survey (Appendix I). Six demographic questions also were included in the survey. An example of the open-ended questions include,"Which do you prefer and why, teaching online or teaching face-to-face?" Thirty-three of 66, or half, of the Likert-style items had to be reverse-coded to be accurately scored, and the two

original surveys were woven together in such a way that every other question was a job satisfaction or an emotional intelligence question to ensure that the participants would not have two job related or two EI related questions in a row. The final six Likert questions were related to job satisfaction only because the original EI survey was 30 items long, and the original job satisfaction survey was 36 items long.

Quantitative analysis was utilized to study the relationship between the emotional intelligence levels of faculty who taught online and their job satisfaction scores. The SPSS version 21.0 along with Microsoft Excel 2011 for Mac and Stata 13 was used to analyze the quantitative data. This investigation utilized the Pearson r, and a 13 x 13 correlation matrix to describe the relationship between emotional intelligence and job satisfaction at the overall level (Appendix J).

4.6 Research Questions and Findings

The following are the two research questions in this study:

1. *Is there a statistically significant, positive, or negative relationship between the EI levels of faculty members who teach at least one course entirely online (as indicated by results from the TEIQue-SF) and their job satisfaction scores as indicated by the results of the JSS?*

   $Hypothesis =$ For online faculty, there is a positive relationship between their TEIQue-SF scores and their respective JSS scores.

To answer this research question effectively, the participants EI scores were correlated with their job satisfaction scores. Correlation testing began after data was assessed. A correlational design was selected because it is appropriate for investigating the relationship and inter-relationship between two or more variables that do not

lend themselves to manipulation (Gliner & Morgan, 2000; Isaac & Michael, 1995). Because the TEIQue-SF uses a trait-based approach to measure an individual's EI (Day & Carroll, 2004), the Pearson r is an appropriate coefficient for determining relationships with the quantitative instrument and works best with interval data. Because some ordinal data also was contained in the survey, Spearman's rho also was applied to examine the testing of ordinal data and a monotonic relationship between the variables (Morgan, 2004). "A monotonic relationship is one that is continuously rising or continuously falling" (Cooper & Shindler, 2008; Szapkiw, n.d; Howell, 2008). Both tests yielded similar results of .381 and .352, respectfully, indicating a slight positive correlation between the two variables, but certainly not a robust correlation. Because both the Spearman's rho and Pearson's r correlations produced very similar results, it's assumed there are no prominent outliers in the data (Caruso, 1997). Table 4.4 illustrates the results of both Pearson's r and Spearman's rho results.

Table 4.4: Spearman's rho and the Pearson Product-Correlation between EI and Job Satisfaction

Parameter	Correlation
Spearman's rho	0.381
r	0.352

Number of observations in sample $N = 72$

The responses were then summed up to arrive at an overall global trait mean EI score for all participants. Table 4.5 details the mean and standard deviation of the participants EI and job satisfaction scores.

2. *Is there a statistically significant positive or negative relationship between male and female online faculty members in terms of respective EI scores and job satisfaction scores as demonstrated by the TEIQue-SF and JSS respectively?*

Table 4.5: Mean and Standard Deviation for EI & Job Satisfaction

Variable	Mean	Std. Dev.	Min	Max
EI	144.5417	16.06758	98	175
JSS	161.1857	29.31651	104	225

Notes: For EI, the higher values indicate higher level of emotional intelligence (Petrides & Furnhman, 2006). The total scores on JSS on this survey can range from 36-252.Higher values indicate higher levels of job satisfaction.

$Hypothesis =$ There is a positive relationship between the gender of online faculty members, their TEIQue-SF scores, and their job satisfaction levels.

To answer the second research question effectively, further analysis of the survey data was conducted using SPSS version 21 and a two-sample t-test. Results indicated that females scored themselves only slightly higher than their male counterparts in both EI and in job satisfaction giving females a slight higher overall mean score than their male counterparts. The difference was modest however resulting in no significant difference in the results based on gender. Tables 4.6 and 4.7 detail these findings.

Table 4.6: Mean Scores For Gender EI and JSS

Gender	EI Mean Score	EI SD	JSS Mean-Score	JSS SD
Females	5.55	1.52	4.59/7.0	1.83
Males	5.44	1.51	4.24/7.0	1.86

Previous research on gender differences in global EI, or overall EI scores found that males ($M = 4.95$, $SD = 0.61$) tend to have a slightly higher EI score than females ($M = 4.82$, $SD = 0.57$) (Petrides, 2009). The findings from this study yielded lower overall EI scores for both males and females with the female overall EI and job satisfaction scores only slightly higher than scores of the male participants.

Table 4.7: Two-Sample t-test with Equal Variances

Group	Obs	Mean	Std. Err	Std. Dev.	95% Conf.	Interval
0 (male)	27	141.4074	3.367457	17.49782	134.485	148.329
1 (female)	45	146.4222	2.241142	15.03404	141.905	150.9389
Combined	72	144.5417	1.89	16.29		
Difference		-5.014	3.893			

$t = -1.2880$; $df = 70$; $pr(T < t) = 0.1010$ $\quad Note : p \leq 0.05$

The standard deviation in all cases is comparable indicating similar dispersions in the female and male responses.

4.7 Further Exploratory Analyses

The following paragraphs outline the most interesting findings from the survey results both quantitative and qualitative in nature.

4.7.1 Quantitative Analysis of Data

Beyond answering the two original research questions, eight, 13 x 13 correlation matrices were generated to determine the strength of the relationship between the four emotional intelligence factors (emotionality, self-control, sociability and well-being) and the nine job satisfaction sub scales (pay, promotion, supervisor, fringe benefits, contingent rewards, operating conditions, co-workers, nature of work and communication), to the demographic variables including, gender, faculty level, online experience level, age, college affiliation and whether the participant was concurrently teaching in a face-to-face environment (Appendix K). Definitions for these factors and subscales can be found in Chapter One as well as in Appendix A. In addition to interpreting the data, the researcher used an established set of criteria to make in-

formed judgments about the significance of the correlations (Gliner & Morgan, 2000). An alpha level of $\alpha < 0.05$ was used to identify correlations that were statistically significant.

4.7.2 Exploring Correlations between EI factors and Job Satisfaction Subscales

Correlations were generated to investigate the relationships between demographic variables, emotional intelligence factors, and job satisfaction subscales. Tables of the different 13 x 13 correlation matrices can be found in the Appendix (Appendix K).

50 factor-level correlations at the overall survey level were found to be statistically significant. The most significant positive correlation was between contingent rewards and pay (0.73). In descending order, the next most significant correlations were, co-workers and contingent rewards (0.63), and fringe benefits and pay (0.62, all p values = <0.05). All total, 50 of the 78 factor-level correlations proved to be statistically significant with the remainder producing moderate to low positive correlations or insignificant negative correlations. The following paragraphs outline the most significant factor-level correlations discovered in analyzing the survey results. Implications from these findings will be discussed in Chapter Five.

4.7.3 Female Scores Compared to Male Scores

Both males and females scored themselves higher on EI questions than on job satisfaction questions. The female overall EI mean (M = 5.53/7.0, SD=1.52) and job satisfaction mean (M = 4.59/7.0,SD=1.83) were slightly higher than their male counterpart's, EI (M = 5.44/7.0, SD=1.51) and job satisfaction means (M = 4.24/7.0, SD=1.86) in both. Males reported feeling worse about pay than females, (M for

males = 2.95/7.0,SD=1.76); (M for females = 3.25/7.0, SD=1.88). At the factor level, males and females had statistically significant positive correlations between pay and one's ability to be promoted (males = 0.51, females = .55, $p =< 0.05$), as illustrated by this comment from a female participant;

> *I appreciate the additional money for teaching online. This shows recognition that online teaching takes much more planning and time. I am grateful for the support I have, including a stellar, wonderful technical specialist to help me with anything from design to implementation. Thank you!* (Female, Lecturer, 10+years experience teaching online, University College).

4.7.4 First-Year Online Faculty Compared to Faculty with Four or More Years of Online Experience

First-year online faculty rated themselves the highest of all faculty in both EI (5.6/7.0,SD=1.51) and JSS scores (4.6/7.0, SD=1.85). First-year online faculty also self-scored the highest on pay satisfaction (M = 3.33/7.0, SD=1.77) and first year online faculty had the highest satisfaction level of emotionality, (M = 5.80/7.0, SD=1.47), which is defined as, " Individuals who are in touch with their own and other people's feelings," (Petrides, 2009). First-year online faculty also yielded an insignificant correlation between supervisor and emotionality (0.36), while their four-plus year counterparts yielded a statistically significant positive correlation for the same variables (0.44), (all p values = <0.05). The following comment from a first-year online faculty member sheds light into this difference in scores;

> *As far as I know, I don't have an online supervisor, so I answered all the supervisor questions as "completely disagree." I suppose the fact that*

I'm unaware of whether I have a supervisor is very telling...of something. (Female, graduate assistant, 1st year teaching online, Arts & Sciences).

4.7.5 Faculty who Teach Only Online Compared to Faculty who Teach Online and Face-to-Face

Fifty (66%) of the participating faculty indicated that they currently also teach in a face-to-face class setting in addition to teaching at least one class online. Faculty who teach only online scored slightly higher in EI (5.6/7.0, SD=1.43) than their counterparts who also teach face-to-face,(5.5/7.0, SD=1.55), while both groups had identical scores in job satisfaction (4.4/7.0, SD=1.85). It is not known if any of the faculty who teach only online at the one institution that was surveyed also teach face-to-face in another institution. It is also not known if the online course was hybrid in nature, meaning it may have contained a face-to-face element, as this question was not asked on the survey.

4.7.6 Younger than 50 Compared to Older than 50

There was a statistically significant positive correlation between pay and well-being (0.47) for participants younger than 50, while those older than 50 expressed an insignificant negative correlation between those same variables (-0.18) (all p values = < 0.05). The comment below from a faculty member over 50 supports these findings;

This university used to pay extra money to online instructors. The money was cut this year. I think it is a very good 'motivational' award to the instructors who pay extra effort to offer courses online. it demoralizes the online instructor a little bit. I believe providing some form of motiva-

tion to the online instructors is important.(Male, Assistant Professor,10+ years teaching online).

4.7.7 College of Arts and Sciences Faculty Compared to All Other Colleges

Nearly half of the participants (47%) identified as being from the College of Arts and Sciences and the remaining half were scattered among the other seven participating colleges or schools. The Arts and Sciences faculty had an insignificant correlation (0.17) between nature of work and self-control while participants from all other colleges and schools expressed a statistically significant positive correlation between the same two variables (0.60, p values $= < 0.05$). A non-College of Arts and Sciences faculty member wrote, " *I like the idea of being able to work on my class whenever I am available instead of specified time (e.g, MWF at 10 am).*" This comment is congruent with a positive feeling and higher scores regarding elements of self-control found in an online learning environment.

4.8 Quantitative Results Summary

The quantitative results of statistical significant interest from this study proved to reside at the factor level of analysis rather than in the original research questions. Notable and sometimes significant differences in scoring were found when examinations were conducted between first year online faculty versus those with four or more years of online experience; faculty younger than 50 versus faculty over 50; and faculty from the College of Arts and Sciences compared to all other participating colleges. Additional analyses of the qualitative findings from this study added another layer of complexity and richness to the findings and are explored next.

4.9 Qualitative Data Analysis

4.9.1 Responses to Exploratory Open-Ended Questions

The exploratory open-ended questions at the beginning of the survey were designed to assess how current online faculty members feel about teaching online. Participants were encouraged to provide detailed responses to the following questions. (a) "Which do you prefer and why, teaching face to face or teaching online?" (b) "What do you like BEST about teaching online?" (c) "What do you like LEAST about teaching online?" (d) "What, if anything, surprised you about teaching online?" (e) "What additional training would you have liked to have had prior to teaching online?" (f) "What, if anything, could NMEL (New Media and Extended Learning) do to assist you with teaching online?" All but the final question are discussed below as most of the responses to question F indicated that the NMEL staff were already doing a great deal to assist faculty in an online environment.

All 72 participants answered at least four of the six questions for a total of 424 responses to the six questions. An additional question was placed at the end of the survey, "Any final thoughts?" and 32 of the 72 participants contributed additional comments here. The researcher believes a key reason for such a high participation rate on the open-ended questions was because all but one were placed at the beginning of the survey, rather than at the end.

Grounded theory (Glaser and Strauss, 1967) principles were applied in analyzing the qualitative data. Induction, data description, salience and presense/absence were employed in coding the comments made by the participants. The responses were coded by theme and categorized into several key categories. Tables 4.8, 4.9, 4.10, 4.11, 4.12, and 4.13 located throughout this chapter, detail the categories and the number of responses from respondents in rank order. The most common cate-

gories from online faculty responses to the open-ended questions dealt with difficulty of relationship building in online, challenges communicating online, the need to be better organized online and the increased flexibility for instructor and student that comes with working in an online environment. The following paragraphs are a synthesis of the results from the open-ended questions. Implications of these comments will be discussed in Chapter Five.

4.9.2 Question A. Which do you prefer and why, teaching face-to-face or teaching online?

Unquestionably, the majority of participants 50 (70%) who responded to this question favored teaching face-to-face versus teaching online. Some of the most common reasons cited included: ability to receive instant feedback from students, explain difficult concepts easier and faster, the sense of community built, ability to see the student's physical and emotional responses, ability to see facial expressions in students, real-time interaction, group exposure to material and discussion and immediate feedback therein, ability to know immediately if instructor is understood or not, harder to feel connected to individuals online, and harder to experience the joy of interacting with students online. A few indicated that it's, "*Hard to care about students from a distance and through the haze of miserable writing or just the void of a physical presence." The struggles that some students experience in college don't readily translate in an online environment,*" one faculty member wrote. A few indicated that it takes an inordinate amount of time to teach online because instructors are expected to be accessible round the clock (Opinio transcript, 2014). One likened it to constantly being "*on call*" (2014).

A much smaller percentage, however, did prefer an online format,(11%), or eight participants, citing the following: convenience; more control over the course ma-

terials; no need to travel to a site regularly; serving as the main caretaker for a disabled spouse, thus requiring the online teaching program; more control over the course material without being distracted or "slowed down" by questions and issues in a physical classroom; able to "see" much more of what students think about and what interests them, online affords more freedom than in a traditional classroom and becoming too nervous to teach face-to-face. Still a few, four participants, (5%) said they liked both face-to-face and online teaching depending on the course and their situation.

4.9.3 Question B. What do you like BEST about teaching online?

Again, key themes rose from the data. Here are included answers that are different from Question A responses: Once class is set up, it's done and can be repeated often with ease; it's easy, faculty can take time to respond to questions or review a student's progress and give better quality responses than faculty otherwise might give; not having to lecture; no spatial constraints; it's efficient; everyone is forced to participate; reach students when they are traveling; and faculty can travel and teach at the same time.

4.9.4 Question C. What do you like LEAST about teaching online?

Key theme responses from this question included: Dealing with the technology; absence or disconnect of the student; the constant contact some faculty feel to be available to their students; not being able to read into the students' email the way one can in person, time delay in communicating, grading, lost sense of community,

Table 4.8: Key Themes from Participant Text in Survey

Q5: What, additional training or other preparation would you have liked to have had prior to teaching online?
Themes/Patterns (times mentioned, rank ordered)
- More training on functions and features of LMS. (7)
- Something on best practices for online teaching. (5)
- Cohort of online teachers to share successes and challenges. (4)
- UNM Learn seminar. (4)
- More education on instructional design. (4)
- More technical training on tools. (4)
- More techniques for engaging the students. (4)
- More awareness of what going online would feel like. (3)
Positive Comments - About Online
- More training is always good; however, finding the time for more training is a challenge. (2)
Negative Comments - About Online Prefer F2F
- Warnings about "out of control" students.

the daily time commitment and "needy students."

4.9.5 Question D. What, if anything, surprised you about teaching online?

Some of the responses to this question were eye-opening, again, both positively and negatively, about teaching online. Examples of some of the positive surprises included: the software is more capable than first anticipated; the inspiration one gets from the students, that deep-level learning can and does occur; all of the technology that is available to faculty to take advantage of; how organized it is (in Blackboard Learn); the diversity of students' ages and backgrounds; that the students are better writers than first thought; how easy it was to set the course up; and how much the course designers do to help ramp up a course.

Table 4.9: Key Themes from Participant Text in Survey

Q4: What, if anything surprised you about teaching online?
Themes/Patterns (times mentioned, rank ordered)
- So many emails. (14)
- How little students know about technology. (9)
- Software is more capable than I expected. (6)
- How much work and preparation it takes. (6)
- How much effort it takes to stay on top of Learn. (6)
- Marginal responses, minimum depth of inquiry. (5)
- Students who fear this technology. (5)
- The quality of the discussion board. (5)
- How efficient it is. (5)
- How boring it is. (4)
- How rude some students can be online. (4)
- That students assume it's easier. (4)
- How many students are from ABQ. (4)
- Diversity of students' ages. (3)
- The new sense of alienation from the students or isolation now working alone so much of the time. (3)
- Loss of 'status' teaching online (3)
- Tendency to not give online students equal footing to F2F students. (3)

Conversely, many faculty responded with negative surprises about teaching online, including: how little some feel they are teaching; how badly prepared students are to write or address technology challenges, how rude students can be; and similarly, the lack of inhibitions exhibited by some students online. "*Behavior that would not be tolerated or expressed in a face-to-face situation, gets expressed regularly online,*" one faculty wrote. One faculty member used the term "bullying" to describe an email that a student sent her and had copied to the entire class. Boredom, inability to stay motivated and isolation also were common themes expressed by some of the 72 participating faculty. Implications of many of these results will be discussed in Chapter Five.

Table 4.10: Key Themes from Participant Text in Survey

Q4: What, if anything surprised you about teaching online?
Themes/Patterns (times mentioned, rank ordered)
- So many emails. (14)
- How little students know about technology. (9)
- Software is more capable than I expected. (6)
- How much work and preparation it takes. (6)
- How much effort it takes to stay on top of Learn. (6)
- Marginal responses, minimum depth of inquiry. (5)
- Students who fear this technology. (5)
- The quality of the discussion board. (5)
- How efficient it is. (5)
- How boring it is. (4)
- How rude some students can be online. (4)
- That students assume it's easier. (4)
- How many students are from ABQ. (4)
- Diversity of students' ages. (3)
- The new sense of alienation from the students or isolation now working alone so much of the time. (3)
- Loss of 'status' teaching online (3)
- Tendency to not give online students equal footing to F2F students. (3)

4.9.6 Question E. What additional training, or other preparation, would you have liked to have had prior to teaching online?

Responses to this question were very straightforward and narrow in scope with most indicating they either felt prepared or could not think of additional training needs, while others wrote that additional training on Learn capabilities would have been helpful. Still others indicated the need for more education about instructional design for online learning, or ideas on how to make the curriculum more inviting or exciting for the students as well as faculty. Tables 4.8, 4.9, 4.10, 4.11, 4.12, and 4.13 illustrate a breakdown of the most common themes noted in the qualitative

comments as well as some of the more notable comments made by faculty.

4.10 Qualitative Results Summary

All 72 survey participants took time to complete at least some of the qualitative questions found in the survey despite the fact that this was not required in order to complete the survey. While the researcher's original intent was to direct her focus to the quantitative results of the study and while these results certainly proved interesting, complex and sometimes surprising data was also found in the examination and coding of the qualitative statements. Further analysis of all the findings along with implications, study strengths, limitations and recommendations for future research is addressed in Chapter Five following the remaining tables detailing the qualitative findings.

Table 4.11: Key Themes from Participant Text in Survey

Q3: What do you like LEAST about teaching online?

Themes/Patterns (times mentioned, rank ordered)
- Inability to fully connect with students - lack of relationship building. (22) - Lack of feedback. (21) - Lost sense of community. (14) - Time investment made in technology. (13) - Sheer amount of emails. (12) - How much effort Learn takes. (11) - Grading. (9) - 24/7 accountability to the students. (8) - Takes more time to develop and teach a course online. (7) - Some classes (e.g., hands-on sciences) dont transfer well to online. (6) - Time lag between students questions and my answers. (6) - Never meeting students in person. (6) - Inability to see faces and gauge understanding level. (5) - Boredom. (5) - Need to be hyper-organized. (4) - Behavior from students that would not be tolerated in a F2F setting. (4) - Anonymity and students who disappear. (4) - Impersonal nature of online. (4) - Lack of status in discussions. (3) - Difficulty in keeping students focused. (3) - Group projects are more demanding this way. (3) - Students can't see my enthusiasm online. (2)
Positive Comments - About Online
- Nothing, I love teaching online.
Negative Comments - About Online - Prefer F2F
- Don't feel that my online course is as effective as my F2F course. I don't feel like my students are getting as good of an education in my online class, as opposed to my F2F class. - Sometimes you feel like you are shouting in the wilderness and nobody hears you. - Difficult to lecture or create a discussion that fosters learning the material in the same way a F2F class does. - Difficult to provide feedback to each student for each discussion. - Need to explain things more thoroughly and make sure students understand. - I feel like my only interaction with students is grading. I am grading all the time. I won't get to know my students well enough to do things like write letters of recommendation. I could be looking for plagiarism all the time, but I don't have time to do that.

Table 4.12: Key Themes from Participant Text in Survey

Q1: Which do you prefer and why, teaching face-to-face or teaching online?
Themes/Patterns: (times mentioned/percent of sample, rank ordered)
- F2F. (50/70%)
- Online. (8/11%)
- Good things about both. (4/5%)
- Depends on course. (2/3%)
- Prefer teaching F2F, but still enjoy online. (2/3%)
- Used to teaching F2F, but enjoying online more and more. (2/3%)
- A sense of less accountability online, as an instructor, easier to "hide" online, not on the spot. (2/3%)
- Enjoy a combination of both F2F and online in the same class. (2/3%)
Positive Comments - About Online
- Online. More control over course material to cover.
- Both different, I now prefer online to F2F with college students.
- Prefer online when students have been acclimated to "college life."
- Web conferencing is helping me bridge need for better social connection online.
- I'm a big fan of technology and online course delivery is a sound way to teach adults.
Negative Comments - About Online - Prefer F2F
- F2F yet students are more interested in checking their cell phone every few minutes than focusing on lecture. Insulting.
- F2F contact is an important part of the course, can't be replicated online.
- Sense of community is lost going online.
- Better able to respond to needs of students F2F.
- Have yet to experience joy of interacting with students online that I do F2F.
- Get immediate feedback from students F2F.
- Easier to build relationships F2F and negotiate boundaries. Feel less accountable as an instructor online.
- F2F allows group exposure and informal social controls - better absorption of materials with immediate explanation.
- F2F is more personal than email. Better ability to connect with students, build relationships between material and student. Opportunity to use all my senses in a F2F setting.
- Hard to care about students from a distance –tend to care about the smart [ones] because you miss the struggles of the ones who are working hard. Struggles don't translate online.

Table 4.13: Key Themes from Participant Text in Survey

Q2: What do you like BEST about teaching online?

Themes/Patterns (times mentioned, rank ordered)
- Time management and ease of 24/7 access. (19)
- Convenience. (16)
- Logistically very flexible. (12)
- Efficiency. (11)
- Diversity of students from all over U.S. (6)
- Really easy. (5)
- Better organized and one can go back and review the modules. (3)
- No commute to campus. (3)
- Able to travel and teach, at the same time. (3)
- Everyone forced to participate. (3)
- No spatial constraints. (3)
- Teach at own pace, no set schedule. (3)
- Provides opp for students to go to college that otherwise couldn't. (3)
- "See" each other more often than once per week. (3)
- Greater interaction. (3)
- Freedom it allows me. (3)
- Students can watch videos, lectures, etc., when they are ready. (3)
Positive Comments - About Online
- Students write more in an online class, which provides more opportunity for providing feedback on their basic writing skills.
- Able to present materials to students in various fashions.
- Students must be responsible for their own learning because the assignments require active engagement to succeed.
- Allows me to work ahead and around other obligations (research, service).
- Seeing students progress through the course, learn the material, change their thinking about life, etc.
- I find the students respond more in an online class then F2F. I get a better feel for student learning from my online class.
- Learning how to do it - creating an engaging curriculum that students benefit from and find enjoyable and continuing to develop my skills.
- Students, especially traveling athletes, can keep up with class work.
Negative Comments - About Online - Prefer F2F
(No input)

Chapter 5

FINDINGS, IMPLICATIONS AND SUMMARY

5.1 Introduction

The overarching purpose of this study was to investigate the relationship between the emotional intelligence levels, EI, of faculty who teach online and their job satisfaction scores. Determining whether a correlation exists between EI and job satisfaction in faculty who teach online could benefit higher education organizations as many institutions search for ways to improve the organizational climate to better motivate and encourage faculty to move to an online environment. Chapter Five presents an overview of the study and an interpretation of the findings. It includes a discussion of the implications, limitations and recommendations for future research.

5.2 Summary of the Study

This study employed a quantitative, correlational design to examine the relationship between EI levels and job satisfaction scores in faculty who taught online. Two reliable and validated surveys (Petrides, 2007 & Spector, 1985) were combined, along with demographic data and open-ended questions to assess how faculty who taught online at one Southwestern university felt about this experience. The total population eligible to take the survey was 265. A total of 72 (27%) of the target population elected to complete the survey (Opinio, 2014).

A correlational analysis indicated a non-statistically significant positive relationship between EI and overall job satisfaction. Similarly, the analysis comparing male EI and job satisfaction levels to female levels indicated a moderate level of significance, still not robust in nature. The results at the factor level, however, proved to be more interesting both in the quantiative as well as the qualitative results and many statistically significant correlations were discovered, some of these are discussed throughout this chapter.

5.3 Findings

5.3.1 Research Question 1

The first research question in the study examined the relationship between EI and job satisfaction levels in faculty who teach online. The results indicated a slight positive correlation (r= .352, $p < 0.05$) between EI and job satisfaction, yet not high enough to reject the null hypothesis. This supports similar findings in earlier research on job satisfaction and EI among academics (Seyal & Afzaal, 2013; Anari, 2012; Sander, 2011, Abraham, 2000). However, most of these studies were not conducted in online settings. The findings between these two variables also are somewhat similar to the findings of Carmeli (2003) who found a positive relationship between EI and job satisfaction using the Schutte Emotional Intelligence Scale (Tapia, 2001) - also a self-report EI instrument - and a six-item job satisfaction scale.

Research on job satisfaction levels of faculty who teach online continues to indicate high levels of faculty burn-out and higher than average levels of stress and work load compared to peers who don't teach online (MacLean, 2006; Hogan & McKnight, 2007; Bollinger & Wasilik, 2009). The overall job satisfaction scores of the 72 participants of this study averaged 4.46 (out of seven). Both females ($M = 4.59/7.0, SD = 1.83$) and males ($M = 4.24/7.0, SD = 1.86$) self-reported lower scores on job satisfaction than on EI. In comparing the mean job satisfaction score of this study with mean job satisfaction scores of normed results for the higher education industry (JSS website, 2011), the study scores are identical when the survey is reset to a six point Likert scale, rather than the seven that was generated for this study by adding a neutral point. The study mean = 3.8/6.0, identical to the reported mean of normed results for all of higher education (JSS website, 2011).

Conversely, while the overall self-reported global EI score of the study's 72 partic-

ipants was a $M = 5.50$, previous study results report a $M = 5.11$ (Petrides, 2009) for the global trait EI score, indicating that this study's mean score for global trait EI was 8% higher than other reported studies using the TEIQue-SF (2009). The mean score of the 72 participants ($M = 5.50$) ranks in the 70th percentile of all previous recorded TEIQue-SF test results (Petrides, 2009). One can hypothesize that, due to social desirability or impression management, respondents were more likely to choose more positive options, items from 5 through 7, even if their true feelings may have indicated job dissatisfaction.

As discussed in Chapter Two, social desirability, or "faking good" is a relatively common bias with Likert-scale items (Braun, 1962; Dunnett, Koun, & Barber, 1981; Hough et al., 1990; White, Nord, Mael, & Young, 1993; Zalinsky & Abraham, 1979) and refers to the tendency for some individuals to mark items as consistently more positive in order to portray themselves in a better light (Furnham, 1986). Given the apparent faking good bias, it is important to interpret the results of the job satisfaction scores cautiously, particularly as it is the only quantitative measurement of job satisfaction in this study.

5.3.2 Research Question 2

The second research question asked if there was a statistically significant, positive, or negative relationship between emotional intelligence levels and job satisfaction scores between female and male faculty who teach online. While results indicated that females had a slightly higher mean score in both EI and job satisfaction than males completing the survey, the difference between the two was modest (4.93 for females versus 4.79 for males overall). Overall correlation levels for EI scores of 0.70 for females and 0.80 (both $p =< 0.05$) for males, were both statistically significant, yet both female and male job satisfaction scores (0.36 and 0.18, $p =< 0.05$) proved

to be insignificant.

5.4 Factor-Level Quantitative Survey Findings

Further analysis of the variables at the factor levels (four in EI and nine in job satisfaction) proved more interesting than results of the original research questions and in some cases, results at the factor level were statistically significant. According to Petrides (2009), the average mean score on the four EI factors is the following: Well-being, 5.4/7.0; emotionality, 5.2/7.0; sociability, 4.9/7.0 and self-control, 4.6/7.0. Results from this study indicated a higher mean on all four EI factors, meaning that the participants of this study self-scored higher, in some cases significantly higher, than other recorded TEIQue-SF test results (Petrides, 2009). Findings from analysis of scores at the factor level will be discussed in subsequent paragraphs.

Perhaps not surprisingly, faculty felt least satisfied with their pay at the university and most satisfied about their overall well-being. The well-being component of trait EI may be especially relevant and helpful in the adjustment process to an online learning environment, since positive emotions are conducive to the development of physical, intellectual and social resources that are necessary for successful coping (Frederickson, 1998). Table 5.1, reflects the rank order of the 13 factor scores from the survey results, from highest, or most positive to lowest, least positive among the 72 participants.

As reported in Chapter Four, the most statistically significant factor level positive correlation of the study was between contingent rewards and pay (0.73, $p =< 0.05$). Spector defined contingent rewards as "a sense of respect, recognition and appreciation" (1994). The next highest significant factor correlation (0.63, $p =< 0.05$) was between co-workers and contingent rewards and finally, (0.62, $p =< 0.05$) between fringe benefits and pay. Contingent rewards were defined as, "Appreciation,

Table 5.1: Rank order of the 13 EI/JSS Factors from Survey

Factor	*Overall Mean/Possible*
Well-being	6.1/7.0
Nature of work	5.8
Emotionality	5.7
Supervisor	5.5
Self-control	5.4
Co-workers	5.2
Sociability	5.0
Communication	4.6
Contingent rewards	4.3
Operating conditions	4.1
Fringe benefits	3.7
Promotion	3.7
Pay	3.1

recognition and rewards for good work," and co-workers were defined as, "Perceived competence and pleasantness of ones colleagues" (1994).

Further analysis of the quantitative data at the factor level yielded five emergent themes: female scores compared to male scores; faculty who taught online for the first time compared to all others; participants from a single college (which represented 47% of the participants) compared to all other participants; those participants younger than 50 compared to those older than 50; and those teaching both face-to-face and online versus those teaching only online. Each theme is described in greater detail with applicable tables using verbatim quotes from participants to support the quantitative findings.

5.4.1 Female Scores Compared to Male Scores

Overall, on most of the factor-level correlations, males and females self-rated similarly, with females higher in many categories, as indicated in Table 5.2. These results are similar to previous EI study results, both trait and ability based, where females self-rated higher than males (Mayer et al, 1999; Goldenberg, Matheson, & Mantler, 2006; Schutte et al., 1998; Van Rooy, Alonso, & Viswesvaran, 2005).

Table 5.2: Correlations on Four Key Factors By Gender

Gender	Supervision	Pay	Communication	Contingent rewards
Females	5.7	3.2	4.8	4.5
Males	5.2	2.9	4.1	3.9

Note: $p =\leq 0.05$

Present research indicates that while there are some marked differences between how men and women interact in face-to-face and online situations, at its core, there are and will remain some fundamental gender-specific similarities as a result of evolution, upbringing, and cultural influences that will make manifest in all educational settings (Herring, 2010). In that light, it's incumbent upon each of us involved in the world of instructional design and online instruction to continue to enrich and enhance the online experience for students and faculty of both genders. We must continue to develop and implement new tools and practices to address the feelings exhibited in many of the comments contained below.

The comments below, made by both male and female participants provide some insight into the gender-based scoring differences found in these four factors; supervision, pay, communication and contingent rewards. Table 5.3 details the key gender differences tied to the four factors.

Table 5.3: Key Gender Differences

Gender & identifiers	Descriptive topic/factor	Statements made in survey
*F, Y, 1-3y	Supervisor	*As far as I know, I don't have a supervisor for my online teaching so I answered all questions with 'completely disagree.' I suppose the fact that I am unaware of whether I have a supervisor is telling...of something.*
M, Y, 1-3y	Supervisor	*My supervisor is technically the department chair and we have almost no relationship. PTI's tend to be invisible and not real.*
F, Y, 7-9y	Communication	*I like doing conference sessions online, because you're right there having a discussion with students, but it's hard to get them to come to these.*
F, Y, 1-3y	Communication	*In online discussions, all students are able to participate equally, no one dominates the conversation, and everyone gets to formulate their ideas clearly before presenting them to the class.*
M, Y, 1-3y	Communication	*I find the students respond more in an online class than they do face-to-face. I get a better feel for student learning from my online class.*
F, Y, 4-6y	Pay	*I am an adjunct which means that I am a contract worker with no benefits and a relatively low salary. I do the work because I find it personally fulfilling rather than for the monetary reasons.*
M, Y, 1-3y	Pay	*Generally like my job. I truly like the students. Pay is not competitive, we lose faculty a lot. I am tired of the work load increase and take home pay decrease. Not equitable. A new associate professor has the same salary as an associate professor with 14 years service. That is unfair and terrible for morale. Not the way to keep faculty at this university!*
M, Y, 1-3y	Pay	*The university used to pay extra money to online instructors. The money was cut this year. I think it is a very good motivational award to the instructors who pay extra effort to offer courses online. It demoralizes the online instructor a little bit. I believe providing some form of motivation to the online instructors is important.*
F, Y, 10+*years*	Contingent rewards	*Sorry about the gloomy online comments. Teaching online has really flattened my usual enthusiasm and good attitude.*
F, N, 1st y	Contingent rewards	*Hate teaching online. All the drudgery of teaching, little of the pleasure. Online does not feel like an equivalent educational experience.*
F, Y, 1st y	Contingent rewards	*Thanks for the opportunity to teach online.*

**F = Female, M = Male, Y = Also taught F2F concurrently, 1st = first year to teach online, 1-3y = at least one but not more than three years experience teaching online, 4-6 = that many years teaching online, 7-9 = years teaching online, and 10+ = ten or more years experience teaching online.*

5.4.2 First-Year Online Faculty Compared to Faculty with Four or More Years of Experience

First-year online faculty rated themselves highest in both EI and job satisfaction compared to all other online faculty categories with an overall EI $M = 5.6/7.0, SD = 1.51$ and a job satisfaction $M = 4.6/7.0, SD = 1.85$). Table 5.4 details some of the key comments made by participants in all categories about what they liked most and least about teaching in an online environment. Key comments reflecting faculty thoughts on the 'best thing about teaching online' as well as the 'worst thing

about teaching online' for all categories of 'years teaching online' are displayed in the demographics column of the table.

Table 5.4: Comments Reflecting the Best and Worst Factors about Teaching Online

Demographics	Best thing about teaching online	Worst thing about teaching online
1st year online faculty: *F,Y,GA, Eng.(*Best*) M,Y,Prof, Med.(*Worst*)	*As someone with a lot on her plate, I enjoy online teaching because of how front-loaded the workload is. I also enjoy the diversity of students who enroll in online classes (working, non-traditional,parents, etc.)*	*Lack of 'status' in discussions. Asynchronous nature of interactions.*
1-3 yrs online: F,Y,Asst. Prof., Eng. (*Best*) F,Y, Lect.,Univ.Lib. (*Worst*)	*Reaching students who can't otherwise attend classes on campus. Convenience of teaching away from the campus.*	*The lack of connection and personal contact with my students. I can't put a face to a name or get a sense of where they are at from reading their faces.*
4+ year faculty: F,Y,Lect.A&S (*Best*) F,Y,Lect.Med (*Worst*)	*The potential to take students far beyond that which I can do in a F2F environment and the media-rich aspects of that.*	*I sometimes feel that I'm always 'on call.'*
7-9+ yrs online: F,Y,Prof.,Educ. (*Best*) F,Y,GA,Eng. (*Worst*)	*Creating beautifully wrought lectures with lovely graphics–I'm most articulate when I do this. Also, I love that ALL the students have to write in depth–thus all, not just a few, are participating.*	*Everything. All graduate students, no money, tons of work, very unsatisfying. Misery.*

**F = Female, M = Male, Y = Also taught F2F concurrently, 1st = first year to teach online, 1-3y = at least one but not more than three years experience teaching online, 4-6 = that many years teaching online, 7-9 = years teaching online, and 10+ = ten or more years experience teaching online.*

Unquestionably, regardless of the amount of time logged teaching online, the most frequent comments made by all participants answering the question, "What do you like BEST about teaching online?" centered around convenience, flexibility and

access to more students. The most frequent comments to the question, "What do you like LEAST about teaching online?" addressed the lack of personal connection or ability to build a relationship, inability to 'read' students effectively, delay in feedback, time spent investing in technology and lack of competence with technology affecting self-efficacy levels, essentially some of the many qualities associated with creating effective interpersonal relations.

Schutte et al. (2001) identified a robust link between qualities of interpersonal relations such as, empathetic perspective taking, self-monitoring, appropriate social skills and cooperation, and EI to facilitate more successful, healthier relationships (Schutte, et al., 2001). Schutte, et al followed up in a 2007 meta-analysis study and found that overall EI "has promise as a predictor of various life outcomes" (Schutte, et al, 2007, p. 2). Many of the comments echoed by the survey participants on what they did not like about teaching online support these findings about the value of EI.

5.4.3 College of Arts and Sciences Faculty Compared to All Other Colleges

Because almost half, 34 (47%) of the 72 study participants identified themselves as being from the College of Arts and Sciences, a comparison of scores was analyzed based on this subgroup versus the remaining 38 (53%), who identified themselves as faculty from one of the seven other schools or colleges at the university that participated in the survey.

The overall mean score between these two groups was almost identical (A&S $M = 4.90$) (Other $M = 4.96$). However, at the factor level a few notable differences in scoring merit further discussion. A statistically significant positive correlation between self-control and nature of work (0.60) was found for the non-Arts and Sciences faculty members while a lower, insignificant correlation (0.17) was found for

Arts and Sciences faculty. Conversely, the correlation between nature of work and pay was statistically significant (0.69) for Arts and Sciences faculty but a slightly negative insignificant score (0.-006, all $p =< 0.05$) for non-Arts and Sciences faculty. Further exploration of these juxtaposed correlations should be examined in greater detail to better understand what, if anything, might be at the root of these scores. The following comment by an Arts and Sciences faculty member seems to explain some of the scores found in the survey:

> *Online instructors seem to be disconnected from the rest of the university's life, so I found a lot of your questions not all that relevant. It often seems to me that a lot of the people around the U don't know what they are doing, but it doesn't affect me and so I don't care. At this point, since I teach totally online, I only come on campus a couple of times a month.*

5.4.4 Younger than 50 Compared to Older Than 50

There was only a slight difference in overall EI and job satisfaction scores when the participants were analyzed based on an age split of younger than 50 and older than 50. This was done because of the 70 participants who revealed their age band, 34 (49%) identified as younger than 50 and 36 (51%) as older than 50. Consistent with previous research (Van Rooy et al., 2005), study participants older than 50 scored themselves slightly higher in both EI and job satisfaction (Older than 50 EI $M = 5.51$), (Younger than 50 EI $M = 5.47$), (Older than 50 JSS $M = 4.65$), (Younger than 50 JSS $M = 4.46$). The most distinct and statistically significant differences in scores in this category was in the correlation between well being and pay (Younger than $50 = 0.47$), (Older than $50 = .-0.18$, all $p =< 0.05$). These results could indicate that when it comes to one's own emotional health and well-being and the pay received to teach, younger faculty are more satisfied than older faculty but

it's difficult to make inferences based on the correlation levels of two factors with a sample size of $N = 72$. Ideally, future researchers will contribute additional findings to this area.

5.4.5 Teach Online Only Spring 2014 versus Teach Online and F2F Spring 2014

Some 50 faculty members taught both online and face-to-face in the spring 2014 semester while only 22 taught online. While most of the correlations of factors were very similar between the two there were a few notable differences. There was a statistically significant positive correlation (0.62) between communication and emotionality for the online only participants while the online and face-to-face group had a much lower, insignificant correlation (0.24) on the same factors. Conversely, the group that taught in both venues had a statistically signficant postive correlation of (0.68) for co-workers and nature of work while the online only group had an insignificant score of (0.32, all p values $= < 0.05$) on the same factors. These differences in scores raise interesting questions about the type of person that feels successful teaching online. Perhaps the online only group has a heightened sense of which emotions they are feeling while teaching online and work harder to communicate effectively - communication factors that may often be taken for granted in face-to-face settings. The statements below from faculty members who only taught online spring 2014, speaks to the frustration of "flying blind" (Goleman, 2011) in an online environment:

> *I think is is the fact that you can never tell if people are really understanding the material, or getting things right. You can't read peoples' faces and see confusion or understanding there. I have yet to discover a good way to take and respond to questions quickly, which would help with*

this problem.

Would have liked more awareness of what going online would feel like.

Similarly, the online only group may have found the questions tied to co-workers irrelevant and therefore scored them very low since they may not interact very often, or ever, with their peers. For some, teaching online is clearly very personal and frankly, may be the only way they can teach. The following comments from two study participants support that premise:

I like teaching online because I get nervous in front of classes sometimes.

Online since I am the main caretaker of my partially paralyzed wife.

5.5 Inductive Themes: Qualitative Results

The following paragraphs detail five resounding themes culled from the many comments and feedback given by the 72 participants. The themes: classroom management and lack of feedback, faculty engaging with students online, technology, feelings of faculty that teach online and time and organizational needs online, are discussed in detail below.

5.5.1 Classroom Management/Feedback Loop

Findings from previous studies showed that there is less concern for others, in general, in online settings than in face-to-face (Bidjerano, 2005; Gunn et al, 2003), suggesting that in a face-to-face classroom setting, the ability to read facial expressions and body language appears to heighten one's concern for others to a greater

extent than is true in an online setting. Five of the survey participants echoed these findings when they responded to the question, "What about teaching online surprised you?" Male and female instructors indicated that at times, students had been rude or engaged in bully-like behavior as illustrated by the following comments:

> *It surprises me how disrespectful students can be when we are not F2F with them. There is a bit of bullying going on in one of my classes. One student replied to me, copying everyone, trying to bully me for points. Others followed up with emails, I stood my ground and did not acknowledge the original email to the class.* (Female, yes - also taught face-to-face concurrently, 10+ years experience teaching online, adjunct).

> *Warnings about out of control students.* (Female, yes - also taught face-to-face concurrently, 1-3 years experience teaching online, lecturer)

> *The continued existence of some spontaneity in the students postings and responses surprised me. As a practicing professional in industry, before I entered teaching, I always reviewed any written statements and responses very carefully to ensure there would be a minimum of misunderstanding or incorrect representation. The students often are less concerned and more ready to clarify or retract statements after sending their comments. Their candor with expressing their feelings and thoughts in written form is less inhibited than I would have expected.* (Male, yes - also taught face-to-face concurrently, 1st year online faculty, lecturer).

> *There was one blow up between a couple of students and you get people who wouldn't comment face-to-face the way they do online. I have worked hard to create definitive structure over interactions and assignments, but still get people who think they can make up their own rules. There is*

> *no informal control from other students, so these people are a bit out of control.* (Female, yes - also taught face-to-face concurrently, 1-3 years experience teaching online, adjunct faculty status).
>
> *Students can be rude when they don't interact with you F2F.* (Male, no - didn't also teach face-to-face spring 2014, 1-3 years experience teaching online, graduate assistant).

In front of a computer screen or a smartphone, there is no feedback loop; all one has are the words sent. We know that there is a negative skew to email (Goleman, 2011), and that unless the sender and receiver know each other well, email is initially read through a slightly negative lens, regardless of how the sender intended it to be read (Goleman, 2011). The gender of the students who made the offending comments is not known but examples of online bullying appears to have happened to both male and female faculty in this study. The researcher attributes some of the student behavior detailed above to the lack of a feedback loop as well as the void in tacit signals between sender and receiver. Without feedback, the amygdala, designed to warn us if a potential attack is eminent, overreacts often causing online conversations to crumble. Implications of these findings will be discussed later in this chapter.

5.5.2 Faculty Interacting with Students Online

A second interesting theme from the qualitative results was comments revolving around the beliefs and biases faculty have toward the students they teach online. Most of these responses were a response to the question, "What about teaching online surprised you the most?"

> *I think I feel somewhat less responsible to my online students than my in-person students, probably because I don't see them. I also think I might be*

less willing to give my online students the benefit of the doubt, as though I am more likely to infer bad intentions from students I don't actually see.

Students automatically think it's (online course) going to be easier than a F2F class.

I'm surprised at the difficulty I have keeping students focused.

That I don't get to see my students and somehow I am very anonymous. I am not able to respond in a dynamic way, which makes it harder to address misconceptions or expand on the course content.

Surprised at how much work it would be (online teaching) and how much I would feel alienated from the course and the students. I was surprised at the degree to which any of the discussion groups managed to get interesting conversations going. Some have engaged each other well.

...it really seems like it has to be a lot easier in an online course than in a face-to-face course for a student to satisfy the requirements and earn a decent grade without necessarily having done much actual learning.

(Surprised at) How much I wanted to see THEIR faces and connect with them on a more personal and F2F manner.

Research on improving instructional techniques in online learning settings, specific to enhancing student emotional experiences and engagement has spiked in recent years (Michinov & Michinov, 2008, Shank, 2009), with much of the research situated within social-cognitive views of self-regulated learning with the ultimate goal of

enhanced self-efficacy. The researcher contends that additional research needs to be focused on enhancing the faculty member's emotional experience and level of emotional engagement as these are needed components to real and sustainable online success.

5.5.3 Technology

Respondents felt strongly, positively or negatively toward technology as expressed by the following comments:

> *The software is far more capable that I was anticipating.*
>
> *So many emails!*
>
> *Surprised by how little students know about technology.*
>
> *It takes more time to develop and teach an online course than a F2F course.*
>
> *When I first learned to do it, the most surprising thing was the number of technical, systemic problems we all had to deal with. Things just routinely fell apart. It was a daunting challenge, but also an opportunity for personal growth. Teaching online today seems so easy by comparison.*

The faculty that have been operating in an online environment for more than a few years tended to give high marks to teaching in an online environment as evidenced by this comment from a survey participant, "*I had TA'd for online courses many times before I taught my own online course. That helped tremendously.*" A key

implication in this comment could be the opportunity to shadow or ease into an online environment, rather than full and immediate immersion, might be a needed enhancement to how we orient future faculty to this drastically different environment.

In a 2006 review of literature on faculty preparation to teach online, Wolf found that faculty do well as online instructors if they themselves had experience as an online student, were involved in their own course design and had support such as shadowing, mentoring and workshops offered to them (Wolf, 2006). While the seismic shift in education to online environments - away from face-to-face settings has transformed how we teach, who we teach and what knowledge and tools are readily available to all, anywhere on the globe - we simply must train faculty in different ways to meet the changing needs of students.

5.5.4 Feelings of Faculty that Teach Online

A key issue facing institutions of higher education and a key goal of this study is to better understand the link, if any, between how faculty that teach online feel, the emotions that teaching online emits, their respective job satisfaction levels, and what they believe they need in order to successfully transition from being a face-to-face instructor to being more of a facilitator in an online environment. Current research indicates that perceived needs from faculty run the gamut from strong support by administration, to robust technical infrastructure, to technical and pedagogical training and mentoring by staff and faculty, to recognition of time spent learning, preparing, and teaching online (Ooman-Early & Murphy, 2009). Faculty comments from this study confirmed these findings from earlier research.

Covington, Petherbridge, & Warren (2005) found that faculty who receive mentorship from other, more-seasoned online faculty, believed that their peers would not "sugar coat" the realities of online teaching but the online support staff might

be more inclined to do so. In Pankowski's (2004) research, faculty respondents believed that mentoring should be provided as a training method and went so far as to respond that without faculty assistance, they would not have continued to teach online. Another emerging theme in that study as well as the researcher's findings revealed that faculty spend more time than perceived by administration preparing and delivering online courses and therefore feel that rewards through additional time off or additional salary are warranted. The comments below illustrate the varied feelings around these subjects elicited by the study participants, including:

> *Oddly, I feel less optimistic about the potential for job satisfaction than I did beforehand. The chances for simple recognition for effective work, not to mention for increased benefits and promotions, or healthy and dynamic relationships with colleagues, seems pretty slight. I currently teach a course with 60 students and can only imagine that cap increasing over time*

> *Hate teaching online. All the drudgery of teaching, little of the pleasure. Online does not feel like an equivalent educational experience.*

> *I'm surprised at how little I feel like I am teaching.*

> *I was surprised that it is difficult for me, as an instructor, to stay motivated to participate and stay involved in the online discussions. I often do so, because it's my duty, but there appears to be a lack of emotional connection.*

> *I appreciate the additional money for teaching online. This shows recognition that online teaching takes much more planning and time. I am*

grateful for the support I have, including a stellar, wonderful technical specialist to help me with anything from design to implementation. Thank you!

(This university) used to pay extra money to online instructors. The money was cut this year. I think it is a very good 'motivational' award to the instructors who pay extra effort to offer courses online. it demoralizes the online instructor a little bit. I believe providing some form of motivation to the online instructors is important.

Isolation was more than I anticipated.

How boring it is. Once the lectures are in the can, I have little to do except answer the occasional emails from students or graders.

I've been most surprised at how big the shift of responsibilities feels; from being the teacher, knowledgeable about the course material, able to present it to students and work through difficulties with them, and there to provide both verbal and written feedback on their efforts in a way that reinforces class activities; to being more like a contact, with whom students get in touch when they choose or when they need to which more often than not is when assignments were missed or technical issues arise. To an extent, I think I expected this, but it's still surprising to feel a lot more like an administrator and a tech-support rep than an educator.

Again, implications of these findings will be discussed further on in this chapter.

5.5.5 Time and Organizational Needs

Faculty also exhibited strong comments, both positive and negative about the element of time when it comes to teaching online. Some believed it takes a great deal more time to teach online, while others said it's a huge time savings move. Again, below are a few comments that support both positions:

> *I'm surprised at how organized it is (Blackboard), since I planned for the semester with about 16 modules.*

> *I was surprised at how much the course designers do and how much we can do with an online course.*

> *The amount of work it takes to get a class ready the first time and how much less work it is to deliver the material in subsequent semesters (though again, the grading is burdensome).*

> *Takes more time to develop and teach an online course than a F2F course. Also has a slightly higher attrition rate because many students initially think it is easier than a F2F class and soon learn it is not.*

> *All the time spent tied to the computer or iPad.*

> *Teaching online has been a very interesting and valuable experience. The process is much easier and improved since I first started.*

5.6 Implications

The following paragraphs outline some ideas and recommendations by topic, based on the findings of this study that may help university administrators, course designers and online faculty improve the online teaching experience for all.

5.6.1 Millenials and Today's Faculty

The current generation to enter college, Generation Y also known as the Millennials, born between 1982 and the early 2000's (Horovitz, 2012), has grown up with high levels of technology; they expect technology to be woven into all aspects of their education. Millenials are hopeful about online learning and believe it to be the future of all education (Wilson, 2004). Millenial online learners are looking for a comprehensive online experience - one that provides them with the ability to complete their educational goals while at the same time enhancing their social and emotional experiences (2004).

Growing up as 'digital natives' (Prensky, 2001), today's students are the first generation to grow up with digital technology from birth. Digital Natives are used to receiving information very quickly. They function best when networked and believe collaboration should be the norm, not the exception. According to Prensky, Millenials are used to the instantaneousness of downloaded music and movies, phones in their pockets, a library on their laptop and instant messaging. They have little patience for lectures, step-by-step logic, and "tell-test" instruction and yet, by and large, this is how the aging instructors of today have been taught to teach, a stark and real dilemma indeed.

Millenial learners, unlike previous generations, demand that in order to effectively engage them and motivate them to learn, we must think more like them and that

means incorporating more in the way of technology, in all facets of instruction. To that end, Prensky noted back in 2001 that students had radically changed, that students of today are no longer the people our educational system was designed to teach Prensky, 2001). The researcher contends that in the thirteen years since Prensky conducted his research, students today are even more radically different and that the chasm between student needs and faculty preparation toward online facilitation has widened as online has become even more popular over those years.

Online course designers and online faculty would be wise to pay close attention to the expectations this group has in terms of an online experience. As importantly, these same designers and higher education administrators should continue to look for new ways to better engage online faculty. The researcher contends that we are at a critical juncture in higher education. The demands and expectations of the customer, the student, are not consistently aligned with how the faculty have thus far, been trained to teach in today's changing landscape. We are operating in separate spheres in many ways.

Similar to the findings from the 2006 Stodel et al study of online students, that found learning to be an online learner was a critical criterion to online success (Stodel, Thompson & MacDonald, 2006), faculty also need to learn how to be effective online instructors and meet or exceed the customer's expectations. Suggestions from the survey participants, including, "*Create an online forum of 'best practices' available to any online faculty member,*" or additional comments like the following that were responses to the question, "What if anything, would you have liked to have had prior to teaching online?" may help online designers and decision makers enhance the experience for faculty and students alike:

More awareness of what going online would feel like.

Seeing more versions of other online courses so I could think about what

works.

More about how students socially and cognitively make sense of transitioning from F2F to online learning. How do they process the transitions?

Knowing the boundaries of my authority and how to get that communicated.

The researcher believes and the findings support the need for new resources and other tools to effectively and more smoothly orient faculty toward an online environment. The researcher also believes that in many cases the faculty simply don't know either what is available or what to ask for to ease the transition to online. Small tools like 'frequently asked question' sheets available to all and calendars or timelines detailing what steps are typically conducted and by when leading up to the start of a new semester in an online world should help, but these suggestions are analogous to a pebble being dropped into an ocean. The need here and thus, the opportunity to ameliorate is great.

5.6.2 Online Faculty Need Mentoring

Because new online teachers had the highest job satisfaction and EI levels, there is opportunity here to further strengthen and enrich this group with additional trainings, mentorships and best practices in online learning so that they will remain motivated to continue to want to teach in an online environment since the need has never been greater (Allen & Seaman, 2103). It appears that the initial impression of moving to an online teaching environment is a positive one (at least for the participants in this study), hence, our goal should be to find ways that continue to encourage and excite this group (and all others), to continue teaching in an online

environment and to maintain or even improve upon the elevated levels of optimism. A mentor-like group of seasoned online faculty available to consult and share ideas with newer online faculty would be a worthwhile investment for this university and others to make.

Tools like the Wisdom-Communities Model, (Gunawardena, Ortegano-Layne, Carabajal, Frechette, Lindemann & Jennings, 2006) called WisCom, utilizes mentoring, "as a mechanism for people supporting people as knowledge is created, and thereby contributing to building a community of wisdom" (p.218). Gunawardena et al, wrote that, "The WisCom model is desinged to be community-centered. Community-centered learning environments offer a new perspective on the importance of creating a supportive context within which learners can navigate the process of learning, collaborate, and become collectively wise" (p.219). In this model, mentors are trained in how to convey new knowledge to novices (Gunawardena et al, 2006). Mentoring aids in supporting new members and in the inclusion of diverse members into the community (Lave & Wenger, 1991) and diversity contributes new perspectives and thus, wisdom to the community.

The WisCom model calls for seasoned experts, in this case more experienced online faculty, to serve as mentors. Matching a novice or inexperienced learner with a more experienced counterpart facilitates the zone of proximal development (Vygotsky, 1978), which refers to achieving a learner's optimal developmental potential, with assistance from an expert. The researcher contends that a formal, well-defined mentorship program would benefit all online faculty, in particular the novices but believe all faculty would benefit in the shared knowledge, increased levels of self-efficacy and social support.

5.6.3 Online Behavior Guidelines

While not large in numbers, the comments made by faculty such as, "*...should have been warned about out of control students,*" linked to online bullying and behavior management are a concern and should be explored further. Contrary to the study's findings about student online behavior, most research about harassment and bullying face-to-face and online was more likely to be associated more frequently with academic colleagues (especially senior colleagues) and superiors than with students (Keashley & Nueman, 2010). Implications of this behavior include an opportunity to train online students on how to write affirmative, uplifting emails and posts to one another and to the instructor to build community and positive relationships. Hopefully, due to the increased numbers in the online learning space, future work will tackle this growing problem. Regardless of who the bully is, faculty must be empowered and equipped with tools and other resources to successfully combat this type of unacceptable behavior. Online classroom etiquette, tips on how to address inappropriate students and a discussion on the magnified emotional impact of email (Goleman, 2011), ought to be incorporated into the training offered to all online faculty members.

5.6.4 Guidelines on Setting Boundaries and Time Management

Bollinger and Wasilik (2009) and Conceicao (2006), discovered that online faculty believed moving teaching to an online environment was more work and took more time. Many faculty in this study corroborated those findings via their comments including this survey participant comment,"*It surprised me how much more work and time it takes to get a class ready online and how much time it takes to accomplish very simple tasks online.*" Administrators and online support departments should

ensure that faculty orientation programs to online learning environments include a realistic assessment of the additional 'front end' time commitment expected from faculty to prepare or move to an online class from a face-to-face format as well as convey key tips or proven shortcuts on time saving practices for online faculty.

In addition, online administrators ought to look for ways to educate and orient faculty new to the online world on how to set boundaries between work and personal time, so that faculty don't feel, "*on call 24/7*" as one faculty wrote in this study. Giving online faculty proven tips and best practices on how best to work smarter and balance their time in an online environment is advised and believe would be appreciated.

5.6.5 Exploration of Loss of Status and Anonymity Online

Again, while not large in terms of actual numbers, six of the comments made by faculty introduced an idea that had yet to be uncovered in the literature, namely loss of status or a feeling of anonymity - either the faculty member felt anonymous or the student felt anonymous to them. Comments included, "*That I don't get to see my students and somehow I am very anonymous...*" and, *"Lack of 'status' in discussions. Asynchronous nature of interactions."* One of the keys to successful distance education programs continues to be the participation and commitment to online of the institutions' top faculty, in all disciplines (Wolcott, 2003). Though limited in number and scope, research studies indicate that faculty participation online hinges on their being intrinsically motivated and feeling equitably rewarded for their efforts (Wolcott, 2003). Traditional academic formats and hundreds of years of history place a great deal of value in the tenured system, academic freedom and ranking of faculty as a whole (Joughlin,1969). In many ways, online learning 'flattens' this traditional, hierarchial system of rewards. This is an intriguing development

which warrants further research.

Wosnitza and Volet (2005) called for more research on the role of emotions in the learning process in online environments, citing theoretical and empirical work in general education as evidence of the importance of understanding the origin, direction and impact of emotions in learning. Over the last 10 years, emotion as a construct has emerged as a vital element of the learning process but many questions remain about emotion in education (Pekrun, 2006). Responding to that call, the literature on emotions in online learning environments has grown in recent years (Zembylas, 2008) but more needs to be done. As evidenced by many of the comments made by the survey participants, emotions run strong, both positively and negatively in the online arena. Research has started that's focused on description and expression of emotion during online learning tasks, often related to collaboration, and the role of the actual tasks at hand in contributing to emotional development (Jarvela, Volet & Jarvenoja 2010; Kimmel & Volet; 2012), but this area is vast and much more needs to be done.

5.7 Study Strengths

As with all research, this study had both strengths as well as limitations. One key strength was that the participants represented a cross section of the university that taught online. As outlined in Chapter Four, all but one college that offered online courses was represented in the survey. All age bands were represented as well as all levels of faculty and all online experience levels. Some 66% of the participants were also teaching at least one face-to-face class concurrently with at least one online course during the spring 2014 semester.

A notable strength of the study was the amount of qualitative data and the quality of the comments that was collected as all of the 72 participants opted to complete the

open-ended questions despite the fact that they were not required to and could have skipped that section. Through these comments, inductive themes were developed including the need for better classroom behavior management guidelines for faculty as a result of the comments linked to online bullying. The researcher contends that she would not have been able to identify these five narrative-based themes (classroom management and lack of feedback, faculty engaging students online, technology, feelings of faculty that teach online and time and organizational needs) without the abundance of qualitative data available to analyze. The researcher believes that placing the open-ended questions at the beginning of the survey, rather than at the end was a key reason for the nearly 100% completion rate of those questions.

Additionally, survey participants were anonymous, their names were never known to the researcher. An honest broker, an unbiased third party, was contracted to collect the names of any participants that wanted to be entered into the drawing for the restaurant gift certificate. The researcher believes that adding this extra layer of confidentiality contributed to the quantity as well as the candor and the assumed authenticity of the qualitative statements.

Another key strength was that the two survey instruments were combined in this study to appear like one 66-item instrument and are considered reliable and validated instruments (Petrides, 2009; Spector, 1994) having been employed in previous higher education study's as well as in many other industries for upwards of more than a decade. While only 27% of the total target population completed the survey, the diversity of the 72 added to the richness of the findings and also closely mirrored the demographic make-up of the original target population.

A final noteworthy strength in this study was that recruitment of faculty was conducted via an email (Appendix F) from the director of the division of the university that oversees and coordinates all online courses. Having the support and credibility of the director and her staff behind the study helped the researcher reach

the targeted audience. Study limitations will be discussed next.

5.8 Limitations

There were several limitations to this study beginning with the low number of participants ($N = 72$, 27% of the target population). Despite the fact that there was representation from eight of the nine colleges or schools that offer online courses at this single university, in some cases, as few as five participants completed the survey from an individual college, thus making it difficult to generalize the results to a wider population. Future quantitative research should strive for a higher number of participants to validate the findings from this study and other, similar research.

Ideally, this study should be expanded to include more faculty, in particular, more tenure-track faculty who teach online as well as to expand and then compare the results found in different universities. Only 29% of the survey participants were tenured or tenure-track faculty from this particular university. It should be noted however that on the whole, only 33% of all faculty that teach online at this university are tenure-track faculty, so this sample size (and make-up) is reflective of the larger population demographics (NMEL website, 2014). The majority of the comments and the quantitative data therefore was contributed by contract-based instructors, not tenured faculty members.

Another limitation to this study was that 69% of the participants had four years or less experience teaching in an online environment. In reviewing the qualitative data, some of the more positive comments about teaching online came from faculty with 10+ years or more online experience. One comment made by a graduate assistant with 10 or more years of online teaching experience from the College of Arts and Sciences illustrated this point when asked what she liked best about teaching online. *"In online discussions, all students are able to participate equally, no one dominates*

the conversation, and everyone gets to formulate their ideas clearly before presenting them to the class." As well as this comment made by a 10+ year online veteran, *"Teaching online has been a very interesting and valuable experience...the process is much easier and improved since I first started."*

As discussed earlier, the group with the highest EI and job satisfaction self-rated scores were the first year online faculty. One can presume therefore that some online instructors start out feeling positive about the environment, but enthusiasm drops off after year one and perhaps, increases again after a decade or more of teaching in an online environment. Similarly, a smaller group may enjoy the environment from day one and thus may seek it out as their preferred mode of instruction and that enthusiasm gets reflected in their comments. The results of this survey did not generate enough data to make additional conclusions or respond to hypotheses about why first year online instructors and instructors with 10 or more years of online experience may be most content in this environment. Hopefully future research will explore these concepts in greater detail.

Since faculty self-selected to participate in this study by responding to the email invitation (Appendix E), the opinions of these 72 faculty members may not necessarily be representative of all 265 faculty who teach online at this university, let alone a wider population of faculty that teach online.

The use of a self-report instrument to measure EI and job satisfaction assumed that the participants would answer truthfully. As discussed earlier, participants may have self-reported in a manner that they believed was expected of them, rather than how they authentically felt. Additionally, participants responded at one moment in time with no additional follow-up survey or interview. The survey was available between the fifth and eighth weeks of a 16-week semester, and as indicated by this faculty participant comment, responding to the question, "Which do you prefer and why, teaching face to face or teaching online?" feelings could have changed over time:

> *This is my first online class and I am enjoying it. I'll be able to answer this question after the semester ends.*

This survey was given only to the faculty who taught a spring 2014 course. Some 310 faculty members from the same university taught at least one course in the fall 2013 semester; therefore not all faculty members who taught online at this particular university had an equal chance to participate in the survey.

Of the 72 faculty that completed the study, it is not known if the online course(s) they taught were hybrid in format - meaning there was at least one face-to-face encounter between the instructor and the students in the semester - or fully online. Future research should add this question to any survey given to faculty and should analyze these results.

Finally, both a limitation and a strength, the two surveys used in this study, the TEIQUE-SF (Petrides, 2004) and the Job Satisfaction Survey, (Spector, 1985), were not designed necessarily to be applied in an online setting thus, the results may be skewed toward having the benefit of visually interacting with another person. At least two of the questions focused on issues pertaining more toward interactions in face-to-face settings than online, including, *"I like the people I work with."* when in many cases, teaching online can be a solitary role, with little to no colleague, supervisor or student face-to-face interactions. In addition, a second comment made by a graduate assistant spoke to the sense of lack of interaction with a supervisor and yet four of the 66 questions on the survey were directed at supervisor interaction and feedback. *"Some of the survey questions are difficult to answer, I don't interface directly with a 'supervisor,' and I am teaching more voluntarily as a PhD candidate, rather than as a permanent employee."* The same is true for the four questions that pertained to benefits - 71% of the survey respondents were not eligible for the benefits that tenured faculty share in. Unquestionably, this had an impact on scores for these questions.

From a strength's perspective, part of the researcher's original inquiry was focused on comparing the results of this study with normed, collected results from earlier studies using these same instruments, future research around these same variables and in a similar environment, should utilize instruments ideally designed to be applied in online learning environments. It is however a limitation that the selected surveys were not created with an online environment in mind.

5.9 Future Research

This study examined trait EI and job satisfaction levels on participating faculty that teach online at one higher education institution. Further analysis of the EI factors (emotionality, self-control, sociability and well-being) in particular should be conducted in other higher education settings. While not practical in nature, use of the 153-item TEIQue, rather than the short 30-item form that was used for this study, is preferred for future studies and will no doubt produce richer, more detailed findings. Moreover, similar to the Online Faculty Satisfaction Survey developed by Bollinger and Wasilik (2009), future developers of online surveys might build-in questions specific to EI to better tap into the EI levels of faculty working in an online environment,rather than applying tools that originated and were designed for face-to-face settings.

Because the 72 participants in this study took considerable time and effort to elaborate on their thoughts and feelings about online education by completing the open-ended questions, future research should include personal interviews and focus groups of faculty that teach online. In addition, to make effective comparisons, two surveys should be offered in a test/retest format, one at the beginning of the term and one near the end thus allowing faculty that are new to online to successfully acclimate to the environment.

Future scholars would also be wise to focus more closely on the tenured group of faculty as they are often what attracts some students to a particular higher education institution in the first place. 70% of the respondents from this study indicated that they prefer teaching face-to-face instead of teaching online, yet the researcher speculates that many of these same respondents - mostly non-tenure track faculty - were hired specifically to teach in an online format, thus this is a perplexing concern for all vested parties in higher education. Additional research should be directed at this confounding problem.

In this survey, the bulk of the respondents (71%) were non-tenured track faculty. On the whole, 67% of all faculty teaching online at this unversity are non-tenured faculty, thus the sample for the study is an accurate reflection of the target population (NMEL website, 2014). As the demand for online continues to increase, future research should examine ways to lessen the gap between the lack of desire to teach online by tenured faculty and the increased need and desire expressed by the customer, the student, to move to an online learning platform.

Finally, future research should include the perspective of the online student. Triangulating student course satisfaction scores and comments with their online instructor EI and job satisfaction scores should add an additional layer of insight and guidance for universities.

5.10 Summary

In Allen and Seaman's 2013 report, Changing Course: 10 Years of Tracking Online Education in the United States, the number of students enrolled in online education increased more than threefold in nine years, going from 9.6% of total enrollment in 2002 to 32% of total enrollment in 2011 (Allen & Seaman, 2013). All post-secondary institutions in 2014 and beyond, should expect demand to only

increase; online education has reached a "tipping point" of acceptance in our society (Gladwell, 2006) and institutions need to ensure the faculty, the administration and the systems in place are prepared for the sea change taking place in education today. No longer is online education limited to for-profit higher education institutions, where it's often been viewed with suspicion and devalued by traditional institutions of higher education (Allen & Seaman, 2013).

Today, with the proliferation of massive open online courses (MOOC's) and the creation or expansion of organizations such as edX, Coursera and Udemy, top-tier colleges and universities including Harvard, Yale, Stanford and University of California at Berkeley, and many other revered educational pillars, are a login away for a population limited only by its access to a computer screen. Columbia University, announced in March 2014 that it had become the fourth Ivy league school to join Harvard and MIT's edX initiative, with the following announcement "Columbia schools and faculty have been engaged with online learning for many years," said Columbia Provost John H. Coatsworth. "Joining edX will help us to provide the richest educational environment possible for Columbia's students, as well as learners outside the University" (The Crimson, 2014).

Udemy, another online platform designed to give educational access to all who desire it regardless of location, boasts the following on its website as their mission statement: "Our goal is to disrupt and democratize education by enabling anyone to learn from the world's experts." (Udemy website, 2014). Disrupt and democratize, strong and pivotal declarations that mandate a collective, vocal and organized response from higher education leaders everywhere. Today's learners, including the Millenials and beyond deserve top-notch educational opportunities available to them regardless of geography, disability status, time constraints or the like. Right now, an online environment is the best platform to help educational institutions meet the changing needs of today's students. Investing in programs to strengthen the emotion-

ally centered qualities of faculty who venture into this domain is just as important, if not more important, as investing in the physical and technical requirements to successfully teach and communicate online.

This study began with a quote from Dan Pink's work in 2006 and ends with a recent Pink quote referencing a blog from the education group, Mind/shift, titled, "What Keeps Students Motivated to Learn?" Pink wrote that, "Relevance, connections, and their teachers' emotional investment, are among the most important criteria needed today to help insure student success and engagement" (Schwartz, 2014). Insuring that faculty, in all educational settings, are emotionally equipped and primed to engage learners using current technological advancements, must be first and foremost on the minds and in the actions of today's schools. Applying technology to help students and faculty build stronger relationships, forge new partnerships and create more passionate learners is exactly where online learning needs to go in order to truly be successful and sustainable. A final quote from one of the survey participants integrates much of what's been discussed in this document:

> *Online allows for the temporal freedom allowing the students to review material, post questions, and perform assessments measurements are the major advantages of online instruction. Some form of online teaching will continue to be in the future of education. I believe it's most effective when combined with a support environment including F2F instruction/mentoring and peer-to-peer interaction. Learning is greatly enhanced by the spontaneous interaction of ideas from a group of people where an idea or comment triggers another idea or comment that leads to the entire group understanding the material. The challenge is determining how best to utilize the online resources in the instructional process.*

Hopefully with time and additional research, more of the qualities that we have

enjoyed in face-to-face for so long will be replicated online. That way, all students and faculty, not just those that can find their way to a physical campus, can share in the life changing transformational experience we know as education.

Appendices

Appendix A

Facet Level Definitions in TEIQue

Appendix A. Facet Level Definitions in TEIQue

1. Adaptability: a facet of the TEIQue, focused upon measuring the flexibility and adaptability of an individual (Petrides, 2009a).

2. Assertiveness: a facet of the TEIQue, defined by Petrides (2009a) as an individual who is forthright, frank, and willing to stand up for their rights (p. 14).

3. Emotion expression: a facet of the TEIQue, devoted to measuring the extent to which an individual is able to share their feelings with others (Petrides, 2009a).

4. Emotion management (others): a facet of the TEIQue, focused upon measuring the extent to which an individual is able to influence the emotions and feelings of others (Petrides, 2009a).

5. Emotion perception (self and others): a facet of the TEIQue, defined by Petrides (2009a) as an individual able to understand his or her own and other peoples feelings.

6. Emotion regulation: a facet of the TEIQue, devoted to measuring the extent to which an individual is able to control his or her emotions (Petrides, 2009a).

7. Impulsiveness (low): a facet of the TEIQue, focused upon measuring the ability of an individual to not give into their urges and to reflect upon their behavior (Petrides, 2009a).

8. Relationships: a facet of the TEIQue, defined as the ability of an individual to create and sustain interpersonal relationships (Petrides, 2009a).

9. Self-esteem: a facet of the TEIQue devoted to measuring the success and self-confidence of an individual (Petrides, 2009a).

10. Self-motivation: a facet of the TEIQue focused upon measuring the extent to which an individual is resilient and driven to succeed (Petrides, 2009a).

11. Social awareness: a facet of the TEIQue, defined by Petrides (2009) as individuals who are accomplished networkers with superior social skills (Petrides, 2009a, p. 14).

12. Stress management: a facet of the TEIQue, devoted to measuring the extent to which an individual is able to function under pressure and stress (Petrides, 2009a).

13. Trait empathy: a facet of the TEIQue, focused upon measuring the extent to which an individual is able to the perspective of another (Petrides, 2009a).

14. Trait happiness: a facet of the TEIQue, defined by Petrides (2009) as the extent to which an individual is happy with his or her life.

15. Trait optimism: a facet of the TEIQue devoted to measuring the extent to which an individual is confident and optimistic (Petrides, 2009a).

Appendix B

Letter from Dr. Petrides

Appendix B. Letter from Dr. Petrides

Direct Line: +44 (0)20 7679 8540
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London Psychometric Laboratory
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U.K.

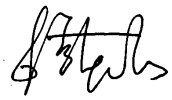
K V Petrides BBA DipPsych MSc PhD CPsychol AFBPsS

9th December, 2013

To whom it may concern,

I hereby grant permission to Mary T. Cooley to use the Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF) solely for the purposes of academic research.

Yours faithfully,



Dr K. V. Petrides

Appendix C

Letter from Dr. Spector

Appendix C. Letter from Dr. Spector

Dear Mary:

You have my permission to use the JSS in your research. You can find copies of the scale in the original English and several other languages, as well as details about the scale's development and norms in the Scales section of my website http://shell.cas.usf.edu/~spector. I allow free use for noncommercial research and teaching purposes in return for sharing of results. This includes student theses and dissertations, as well as other student research projects. Copies of the scale can be reproduced in a thesis or dissertation as long as the copyright notice is included, "Copyright Paul E. Spector 1994, All rights reserved." Results can be shared by providing an e-copy of a published or unpublished research report (e.g., a dissertation). You also have permission to translate the JSS into another language under the same conditions in addition to sharing a copy of the translation with me. Be sure to include the copyright statement, as well as credit the person who did the translation with the year.

Thank you for your interest in the JSS, and good luck with your research.

Best,

Paul Spector, Distinguished Professor
Department of Psychology
PCD 4118
University of South Florida
Tampa, FL 33620
813-974-0357
pspector@usf.edu
http://shell.cas.usf.edu/~spector

Appendix D

UNM Institutional Review Board Approval Letter

Appendix D. UNM Institutional Review Board Approval Letter

UNM | Office of the Institutional Review Board

January 22, 2014

Dear Dr. Boverie:

On 01-22-14, the IRB reviewed the following submission:

Type of Review:	Expedited
Title of Study:	**Trait Emotional Intelligence and Job Satisfaction: A Quantitative Study of Faculty Teaching Online**
Investigator:	Boverie/Cooley
Study ID:	00214
Documents Reviewed:	Protocol v122713. New Study Application and its supporting documentation submitted 12-27-13.
Review Category:	Exempt category 2

The IRB determined that the application is exempted. IRB review and approval by this organization is not required.

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are being considered and there are questions about whether IRB review is needed, please contact the OIRB for guidance.

Sincerely,

J. Scott Tonigan, PhD
IRB Chair

The University of New Mexico • MSC02 1665 • 1 University of New Mexico • Albuquerque, NM 87131-0001 • Phone 505.277.2644 • email irbmaincampus@unm.edu • research.unm.edu/IRB

Appendix E

Letter to UNM Faculty

Appendix E. Letter to UNM Faculty

Dear UNM Online Faculty,

As part of my PhD research through the Department of Organization, Information and Learning Sciences (OI&LS), at UNM, I am conducting a study to shed additional light on the relationship between emotional intelligence, (EI,) and job satisfaction levels in faculty that teach in an online learning environment. EI, is most often described as, "a form of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action" (Mayer and Salovey, 1990). Thus far, EI has been studied at length in face-to-face environments, but rarely in online settings, hence, the need for this study.

I'm sure you see a lot of these, and as a researcher, you understand how valuable your contribution is if you take the time to complete the survey. But I would like to stress that capturing aspects of your experience teaching online is so important, as to date, most research about the online experience is focused on the student or the college administrator – not the faculty member. More focus needs to be placed on our online faculty's teaching experience and job satisfaction levels– this is a key reason that NMEL is so supportive of my research efforts here.

The following link will take you to the survey:

URL: https://esurvey.unm.edu/opinio/s?s=18957

I expect the survey to take you approximately 20 minutes to complete.

As a thank-you for your time, the IRB office has agreed to allow me to conduct a drawing for a $100.00 gift certificate to a local restaurant. To ensure anonymity to me on who has completed the survey, Dr. Becky Adams (reada321@unm.edu), has agreed to serve as an Honest Broker and collect emails from all of you that complete the survey and who want to be included in the drawing. **After finishing the survey, please send a separate email to Becky Adams with the subject: "For Cooley Study" and ask her to put your name in the drawing.** The winner will be selected by May 1, 2014.

In addition, if you would like a copy of the summary of the survey findings, again, please email Becky (reada321@unm.edu) and we will make sure you receive a copy this summer.

Thank you in advance for your participation and assistance as we work to learn more about how to enrich the online experience for all faculty members.

Sincerely,

Mary T. Cooley
PhD Candidate, UNM

Appendix F

Letter to UNM Faculty from D. Knotts

Appendix F. Letter to UNM Faculty from D. Knotts

Appendix I. Survey Instrument

25	Those close to me often complain that I don't treat them right	○	○	○	○	○	○	○
26	The benefits we receive are as good as most other organizations offer	○	○	○	○	○	○	○
27	I often find it difficult to adjust my life according to the circumstances	○	○	○	○	○	○	○
28	I do not feel that the work I do is appreciated	○	○	○	○	○	○	○
29	On the whole, I'm able to deal with stress	○	○	○	○	○	○	○
30	My efforts to do a good job are seldom blocked by red tape	○	○	○	○	○	○	○
31	I often find it difficult to show my affection to those close to me	○	○	○	○	○	○	○
32	I find I have to work harder at my job because of the incompetence of people I work with	○	○	○	○	○	○	○
33	I'm normally able to "get into someone's shoes" and experience their emotions	○	○	○	○	○	○	○
34	I like doing the things I do at work	○	○	○	○	○	○	○
35	I normally find it difficult to keep myself motivated	○	○	○	○	○	○	○
36	The goals of this organization are not clear to me	○	○	○	○	○	○	○
37	I'm usually able to find ways to control my emotions when I want to	○	○	○	○	○	○	○
38	I feel unappreciated by the organization when I think about what they pay me	○	○	○	○	○	○	○
39	On the whole, I'm pleased with my life	○	○	○	○	○	○	○
40	People get ahead as fast here as they do in other places	○	○	○	○	○	○	○
41	I would describe myself as a good negotiator	○	○	○	○	○	○	○
42	My supervisor shows too little interest in the feelings of subordinates	○	○	○	○	○	○	○
43	I tend to get involved in things I later wish I could get out of	○	○	○	○	○	○	○
44	The benefit package we have is equitable	○	○	○	○	○	○	○
45	I often pause and think about my feelings	○	○	○	○	○	○	○
46	There are few rewards for those who work here	○	○	○	○	○	○	○
47	I believe I'm full of personal strengths	○	○	○	○	○	○	○
48	I have too much to do at work	○	○	○	○	○	○	○
49	I tend to "back down" even if I know I'm right	○	○	○	○	○	○	○
50	I enjoy my coworkers	○	○	○	○	○	○	○
51	I don't seem to have any power at all over other people's feelings	○	○	○	○	○	○	○
52	I often feel that I do not know what is going on with the organization	○	○	○	○	○	○	○
53	I generally believe that things will work out fine in my life	○	○	○	○	○	○	○
54	I feel a sense of pride in doing my job	○	○	○	○	○	○	○
55	I find it difficult to bond well even with those close to me	○	○	○	○	○	○	○
56	I feel satisfied with my chances for salary increases	○	○	○	○	○	○	○
57	Generally, I'm able to adapt to new environments	○	○	○	○	○	○	○
58	There are benefits we do not have which we should have	○	○	○	○	○	○	○
59	Others admire me for being relaxed	○	○	○	○	○	○	○
60	I like my supervisor	○	○	○	○	○	○	○

61	I have too much paperwork	○	○	○	○	○	○	○
62	I don't feel my efforts are rewarded the way they should be	○	○	○	○	○	○	○
63	I am satisfied with my chances for promotion	○	○	○	○	○	○	○
64	There is too much bickering and fighting at work	○	○	○	○	○	○	○
65	My job is enjoyable	○	○	○	○	○	○	○
66	Work assignments are not fully explained	○	○	○	○	○	○	○

Finally, please complete the next few questions tied to demographic information. Thanks!

Faculty Level/Title:

Previous teaching experience/online

College/School affiliation

Gender

Ethnicity

Age

Any final thoughts? Please write them BELOW.

Thank you in advance for your participation and assistance as we work to learn more about how to enrich the online experience for all faculty members.

Finish

Appendix J

Total Survey Results Matrix

Total Survey Sample

Total Sample	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe bene	Continge nt	Oper. Cond.	Co-workers	Nature of work	COMM	EI TOTAL	Job Sat Total	Survey Total
Mean	5.668	5.387	6.109	5.037	3.132	3.701	5.535	3.722	4.271	4.118	5.243	5.854	4.573	5.500	4.461	4.933
STDEV	1.485	1.452	1.166	1.417	1.839	1.703	1.631	1.676	1.706	1.717	1.547	1.221	1.655	1.522	1.854	1.787
Sample Mean STDEV	0.895	0.746	0.713	0.769	1.355	1.338	1.203	1.260	1.315	1.176	1.117	0.948	1.082	0.560	0.818	0.581
Question Mean STDEV	0.455	0.525	0.196	0.434	0.737	0.310	0.390	0.381	0.533	0.610	0.493	0.127	0.287	0.797	0.969	1.030
Alpha	0.690	0.437	0.567	0.479	0.599	0.609	0.563	0.579	0.615	0.519	0.560	0.593	0.427	0.828	0.906	0.915

All (n=70)	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe Bene	Cont-Rew	Oper. Cond	Co-workers	Work Nature	COMM	EI	Job-Sat
EMO	1														
SC	0.4297*	1													
WB	0.3680*	0.4977*	1												
SOC	0.4039*	0.4667*	0.3415*	1											
Pay	0.0364	0.1608	0.1194	0.0866	1										
PROMO	0.0025	-0.0747	-0.1166	0.0516	0.5151*	1									
SUPER	0.3446*	0.2372*	0.3586*	0.1616	0.2500*	0.3067*	1								
Fringe Ben	0.0645	0.0442	0.0401	0.0323	0.6187*	0.4364*	0.0852	1							
Cont-Rew	0.1474	0.2041	0.2495*	0.2479*	0.7288*	0.5182*	0.4012*	0.5903*	1						
Oper. Cond	0.1604	0.3445*	0.0986	0.1322	0.4620*	0.0551	0.1625	0.2087	0.3780*	1					
Coworkers	0.3431*	0.4424*	0.4106*	0.3350*	0.4670*	0.1219	0.4327*	0.3462*	0.6207*	0.5308*	1				
Work-Nat	0.3423*	0.4140*	0.6109*	0.3308*	0.3519*	0.1851	0.4916*	0.1922	0.6001*	0.3622*	0.5179*	1			
COMM	0.3354*	0.2972*	0.2294	0.3294*	0.3726*	0.2065	0.5230*	0.2873*	0.5776*	0.3876*	0.6070*	0.4807*	1		
EI	0.7504*	0.7689*	0.6682*	0.7572*	0.097	0.0079	0.3599*	0.0477	0.2668*	0.2145	0.4761*	0.5506*	0.4020*	1	
Job-Sat	0.2583*	0.3025*	0.2827*	0.2654*	0.7995*	0.5641*	0.5661*	0.6381*	0.8917*	0.5453*	0.7207*	0.6374*	0.6750*	0.3541*	1

*Statistical significance denoted by * following Correlation*

Appendix K

Detailed Survey Results Matrices

Female Survey Sample

Female Sample	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe bene	Contingent	Oper. Cond.	Co-workers	Nature of work	COMM	EI TOTAL	Job Sat Total	Survey Total
Mean	5.681	5.415	6.115	5.167	3.250	3.844	5.706	3.828	4.472	4.117	5.272	6.000	4.817	5.535	4.590	5.019
STDEV	1.480	1.460	1.191	1.424	1.882	1.687	1.567	1.623	1.703	1.692	1.549	1.099	1.629	1.525	1.835	1.765
Sample Mean STDEV	0.902	0.755	0.709	0.758	1.464	1.404	1.095	1.220	1.264	1.126	1.159	0.854	1.059	0.561	0.784	0.583
Question Mean STDEV	0.561	0.611	0.225	0.379	0.618	0.296	0.348	0.314	0.590	0.602	0.428	0.112	0.286	0.834	0.967	1.019
Alpha	0.716	0.468	0.547	0.446	0.628	0.656	0.510	0.575	0.594	0.492	0.585	0.596	0.421	0.840	0.907	0.925

Female (N=43)	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe Bene	Cont-Rew	Oper. Cond	Co-workers	Work Nature	COMM	EI	Job-Sat
EMO	1														
SC	0.3372*	1													
WB	0.2475	0.4824*	1												
SOC	0.3106*	0.4094*	0.3278*	1											
Pay	-0.0422	0.1272	0.1849	-0.0499	1										
PROMO	-0.104	-0.0103	0.0478	-0.0063	0.5454*	1									
SUPER	0.3664*	0.2504	0.4239*	0.2681	0.1872	0.3622*	1								
Fringe Ben	0.0146	0.0481	0.131	-0.0878	0.5710*	0.4147*	0.0445	1							
Cont-Rew	0.1192	0.1296	0.4393*	0.0689	0.6926*	0.5104*	0.3861*	0.5876*	1						
Oper. Cond	0.0808	0.3155*	0.1869	0.0803	0.4820*	0.1084	0.1874	0.1792	0.3258*	1					
Coworkers	0.3326*	0.4891*	0.5059*	0.2762	0.4519*	0.1575	0.5252*	0.2674	0.6443*	0.5014*	1				
Work-Nat	0.2144	0.3794*	0.7169*	0.2394	0.3958*	0.1689	0.4502*	0.2518	0.7334*	0.4275*	0.6498*	1			
COMM	0.3728*	0.3154*	0.3510*	0.295	0.2801	0.1286	0.5995*	0.2178	0.4779*	0.2982	0.6402*	0.5438*	1		
EI	0.7045*	0.7526*	0.6577*	0.6994*	0.0165	-0.0291	0.4257*	0.0277	0.2164	0.1913	0.5171*	0.4985*	0.4523*	1	
Job-Sat	0.1805	0.3242*	0.4643*	0.1635	0.7741*	0.5453*	0.5689*	0.6054*	0.8924*	0.5336*	0.7493*	0.7208*	0.6027*	0.3445*	1

*Statistical significance denoted by * following Correlation*

Appendix K. Detailed Survey Results Matrices

Male Survey Sample

Male Sample	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe bene	Conting ent	Oper. Cond.	Co-workers	Nature of work	COMM	EI TOTAL	Job Sat Total	Survey Total
Mean	5.648	5.340	6.099	4.821	2.935	3.463	5.250	3.546	3.935	4.120	5.194	5.611	4.167	5.442	4.247	4.790
STDEV	1.496	1.441	1.127	1.383	1.758	1.710	1.703	1.753	1.665	1.765	1.550	1.373	1.626	1.518	1.865	1.816
Sample Mean STDEV	0.901	0.742	0.733	0.751	1.151	1.206	1.337	1.328	1.353	1.275	1.064	1.059	1.012	0.563	0.843	0.559
Question Mean STDEV	0.318	0.394	0.229	0.552	0.940	0.358	0.496	0.521	0.487	0.637	0.643	0.192	0.305	0.770	1.000	1.078
Alpha	0.684	0.406	0.631	0.514	0.551	0.520	0.633	0.604	0.660	0.577	0.546	0.596	0.367	0.842	0.933	0.926

Male (N=27)	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe Bene	Cont-Rew	Oper. Cond	Co-workers	Work Nature	COMM	EI	Job-Sat
EMO	1														
SC	0.5708*	1													
WB	0.4539*	0.5360*	1												
SOC	0.5537*	0.5693*	0.3684	1											
Pay	0.1748	0.2423	0.1254	0.2537	1										
PROMO	0.2177	-0.0967	-0.2115	0.1823	0.5096*	1									
SUPER	0.2435	0.2342	0.2681	0.0173	0.3899*	0.247	1								
Fringe Ben	0.1191	0.0226	-0.0485	0.2022	0.6844*	0.4325*	0.1497	1							
Cont-Rew	0.2356	0.3414	0.0398	0.4444*	0.7868*	0.4975*	0.3931*	0.5959*	1						
Oper. Cond	0.3584	0.3897*	0.0307	0.2598	0.4148*	0.0149	0.1395	0.299	0.5377*	1					
Coworkers	0.2597	0.3278	0.2175	0.3970*	0.5108*	0.1545	0.2928	0.5306*	0.6593*	0.6092*	1				
Work-Nat	0.5809*	0.5190*	0.5083*	0.4596*	0.2934	0.1972	0.5661*	0.1131	0.3632	0.2586	0.3388	1			
COMM	0.3262	0.3233	0.1662	0.3392	0.5153*	0.2584	0.4152*	0.4190*	0.7078*	0.5817*	0.6617*	0.3758	1		
EI	0.7977*	0.7980*	0.6788*	0.8225*	0.2212	0.1042	0.2371	0.0766	0.3334	0.2901	0.3543	0.6747*	0.3637	1	
Job-Sat	0.358	0.3513	0.1395	0.4199*	0.8427*	0.5557*	0.5493*	0.6801*	0.8961*	0.5939*	0.7296*	0.5043*	0.7676*	0.4001*	1

*Statistical significance denoted by * following Correlation*

Appendix K. Detailed Survey Results Matrices

Survey Sample – Experience 1st Year On-Line Teaching

1st Year Sample	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe bene	Contingent	Oper. Cond.	Co-workers	Nature of work	COMM	EI TOTAL	Job Sat Total	Survey Total
Mean	5.847	5.352	6.157	5.269	3.333	3.833	5.694	4.181	4.458	4.264	5.431	6.000	4.653	5.611	4.650	5.087
STDEV	1.474	1.493	1.201	1.351	1.823	1.776	1.498	1.901	1.807	1.720	1.518	1.088	1.705	1.513	1.855	1.774
Sample Mean STDEV	1.029	0.723	0.706	0.549	1.385	1.393	1.035	1.533	1.520	1.076	1.114	0.924	1.089	0.516	0.902	0.541
Question Mean STDEV	0.367	0.584	0.252	0.530	0.772	0.371	0.626	0.691	0.539	0.873	0.599	0.164	0.309	0.792	0.996	1.023
Alpha	0.789	0.370	0.543	0.082	0.645	0.625	0.556	0.677	0.695	0.491	0.606	0.682	0.398	0.824	0.964	0.936

First year teaching (n=18)	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe Bene	Cont-Rew	Oper. Cond	Co-workers	Work Nature	COMM	EI	Job-Sat
EMO	1														
SC	0.449	1													
WB	0.3064	0.4558	1												
SOC	0.293	0.366	0.1979	1											
Pay	-0.3377	-0.0503	-0.0188	0.2418	1										
PROMO	-0.353	-0.0972	0.0404	0.3583	0.8175*	1									
SUPER	0.3613	0.2267	0.2313	0.3896	0.5940*	0.4356	1								
Fringe Ben	-0.2125	-0.1101	-0.2184	0.3475	0.7848*	0.7918*	0.6057*	1							
Cont-Rew	-0.2296	0.1011	0.134	0.3352	0.8813*	0.7888*	0.6192*	0.7810*	1						
Oper. Cond	-0.0721	0.175	-0.0326	0.0277	0.5736*	0.3601	0.4445	0.4629	0.6863*	1					
Coworkers	0.0909	0.4297	0.4728*	0.3298	0.6140*	0.4761*	0.6704*	0.353	0.7980*	0.6063*	1				
Work-Nat	-0.023	0.2759	0.4197	0.4555	0.7296*	0.6555*	0.5492*	0.5434*	0.8803*	0.5793*	0.8515*	1			
COMM	0.0429	0.0652	0.1903	0.3503	0.6960*	0.6808*	0.7846*	0.6859*	0.8245*	0.5136*	0.7735*	0.7257*	1		
EI	0.6606*	0.6805*	0.6152*	0.7706*	0.0715	0.1504	0.4603	0.0647	0.195	0.0302	0.4521	0.449	0.2719	1	
Job-Sat	-0.1538	0.0356	0.0288	0.3087	0.9275*	0.8125*	0.7168*	0.8454*	0.9648*	0.6701*	0.7425*	0.8255*	0.8544*	0.174	1

Statistical significance denoted by * following Correlation

Appendix K. Detailed Survey Results Matrices

Survey Sample – Experience 4 Years or More

4+ Years Sample	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe bene	Conting ent	Oper. Cond.	Co-workers	Nature of work	COMM	EI TOTAL	Job Sat Total	Survey Total
Mean	5.665	5.402	6.023	5.106	3.205	3.807	5.341	3.795	4.102	4.102	5.125	5.636	4.375	5.497	4.388	4.892
STDEV	1.405	1.336	1.095	1.338	1.901	1.734	1.611	1.577	1.689	1.661	1.461	1.306	1.614	1.431	1.788	1.726
Sample Mean STDEV	0.817	0.706	0.722	0.855	1.491	1.332	1.322	1.141	1.485	1.194	1.093	1.051	1.077	0.574	0.939	0.660
Question Mean STDEV	0.455	0.553	0.269	0.419	0.583	0.286	0.248	0.416	0.461	0.355	0.474	0.134	0.379	0.775	0.848	0.982
Alpha	0.681	0.492	0.652	0.640	0.638	0.597	0.652	0.557	0.717	0.541	0.602	0.633	0.464	0.885	0.961	0.970

4+ years of teaching (n=22)	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe Bene	Cont-Rew	Oper. Cond	Co-workers	Work Nature	COMM	EI	Job-Sat
EMO	1														
SC	0.4716*	1													
WB	0.6157*	0.7336*	1												
SOC	0.5750*	0.4496*	0.5957*	1											
Pay	0.3307	0.3164	0.0995	0.1257	1										
PROMO	0.1391	-0.0998	-0.2101	-0.2484	0.367	1									
SUPER	0.4430*	0.3047	0.2403	0.0666	0.1158	0.3848	1								
Fringe Ben	0.2231	0.0864	0.0622	-0.1491	0.6968*	0.2978	-0.1713	1							
Cont-Rew	0.2698	0.4121	0.216	0.0514	0.8792*	0.3547	0.3036	0.5691*	1						
Oper. Cond	0.3615	0.4437*	0.2913	0.1771	0.3968	-0.2491	0.1577	0.0922	0.4088	1					
Coworkers	0.4964*	0.5047*	0.2752	0.2226	0.5447*	-0.0143	0.3483	0.3504	0.6244*	0.7064*	1				
Work-Nat	0.4580*	0.6366*	0.7555*	0.3526	-0.0349	-0.1572	0.4308*	-0.0464	0.0826	0.3352	0.1873	1			
COMM	0.4307*	0.2829	0.1962	0.2048	0.4005	0.2393	0.5306*	0.0614	0.5455*	0.5399*	0.5619*	0.2816	1		
EI	0.7865*	0.7715*	0.8528*	0.8148*	0.2453	-0.0607	0.3348	0.04	0.2784	0.3611	0.4219	0.6787*	0.3739	1	
Job-Sat	0.4788*	0.4943*	0.3034	0.1484	0.8351*	0.4108	0.4844*	0.5480*	0.8911*	0.5581*	0.7552*	0.3052	0.6912*	0.4312*	1

Statistical significance denoted by * following Correlation

Survey Sample – College of Arts & Science

A&S Sample	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe bene	Conting ent	Oper. Cond.	Co-workers	Nature of work	COMM	EI TOTAL	Job Sat Total	Survey Total
Mean	5.684	5.284	6.113	5.039	3.037	3.647	5.632	3.735	4.294	3.860	5.125	5.904	4.603	5.486	4.426	4.908
STDEV	1.466	1.491	1.196	1.475	1.757	1.724	1.413	1.696	1.669	1.611	1.693	1.115	1.588	1.534	1.835	1.784
Sample Mean STDEV	0.921	0.739	0.726	0.810	1.337	1.347	1.068	1.291	1.219	1.019	1.191	0.839	0.938	0.567	0.721	0.512
Question Mean STDEV	0.458	0.581	0.211	0.492	0.564	0.241	0.456	0.449	0.528	0.702	0.643	0.081	0.181	0.820	1.015	1.067
Alpha	0.724	0.405	0.564	0.501	0.611	0.605	0.605	0.599	0.574	0.467	0.556	0.568	0.282	0.843	0.896	0.904

College A&S (n=33)	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe Bene	Cont-Rew	Oper. Cond	Co-workers	Work Nature	COMM	EI	Job-Sat
EMO	1														
SC	0.5115*	1													
WB	0.3667*	0.3638*	1												
SOC	0.2616	0.3838*	0.1365	1											
Pay	-0.0755	0.2566	0.169	0.0872	1										
PROMO	0.0258	-0.002	-0.0649	0.0258	0.7003*	1									
SUPER	0.4521*	0.1533	0.3546*	-0.0245	0.3584*	0.4841*	1								
Fringe Ben	0.0142	0.1882	-0.0344	0.0822	0.5719*	0.6011*	0.1222	1							
Cont-Rew	-0.0162	0.0707	0.1948	-0.0072	0.7656*	0.7294*	0.4647*	0.6002*	1						
Oper. Cond	-0.0117	0.4630*	0.2199	-0.0419	0.7237*	0.4459*	0.3308	0.4434*	0.5514*	1					
Coworkers	0.2799	0.4930*	0.4508*	0.1586	0.5681*	0.3522*	0.4536*	0.4119*	0.6815*	0.6243*	1				
Work-Nat	0.0949	0.1705	0.5548*	0.029	0.6860*	0.4171*	0.5498*	0.3599*	0.7675*	0.5142*	0.6151*	1			
COMM	0.2089	0.2577	0.0618	0.1127	0.4460*	0.4482*	0.5801*	0.3436	0.6090*	0.4549*	0.6510*	0.4747*	1		
EI	0.7632*	0.7695*	0.5648*	0.6622*	0.1511	0.0619	0.3472*	0.1376	0.1153	0.1741	0.4544*	0.2896	0.2936	1	
Job-Sat	0.1131	0.2677	0.2815	0.0527	0.8396*	0.7292*	0.6270*	0.6554*	0.9100*	0.7084*	0.7786*	0.8123*	0.7174*	0.2727	1

Statistical significance denoted by * following Correlation

Appendix K. Detailed Survey Results Matrices

Survey Sample – Colleges Other than Arts & Science

Not A&S Sample	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe bene	Contingent	Oper. Cond.	Co-workers	Nature of work	COMM	EI TOTAL	Job Sat Total	Survey Total
Mean	5.655	5.478	6.105	5.035	3.217	3.750	5.447	3.711	4.250	4.349	5.349	5.809	4.546	5.512	4.492	4.956
STDEV	1.503	1.412	1.141	1.366	1.912	1.688	1.804	1.662	1.743	1.780	1.401	1.311	1.718	1.513	1.870	1.790
Sample Mean STDEV	0.884	0.750	0.711	0.740	1.383	1.346	1.321	1.249	1.411	1.269	1.052	1.045	1.208	0.560	0.904	0.643
Question Mean STDEV	0.475	0.524	0.199	0.425	0.903	0.440	0.381	0.339	0.556	0.530	0.362	0.183	0.444	0.792	0.951	1.015
Alpha	0.680	0.477	0.588	0.479	0.611	0.636	0.554	0.577	0.658	0.546	0.586	0.621	0.524	0.839	0.933	0.942

Not A&S College (n=37)	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe Bene	Cont-Rew	Oper. Cond	Co-workers	Work Nature	COMM	EI	Job-Sat
EMO	1														
SC	0.3191	1													
WB	0.3680*	0.5946*	1												
SOC	0.5280*	0.5582*	0.4894*	1											
Pay	0.0999	0.0328	0.0283	0.094	1										
PROMO	-0.0214	-0.122	-0.2007	0.046	0.3808*	1									
SUPER	0.2225	0.3186	0.3831*	0.2981	0.1363	0.1484	1								
Fringe Ben	0.035	-0.0661	0.1442	0.015	0.6504*	0.3023	-0.0085	1							
Cont-Rew	0.2877	0.3167	0.2779	0.4586*	0.6591*	0.3380*	0.3267*	0.5681*	1						
Oper. Cond	0.2723	0.2891	0.0201	0.2407	0.2455	-0.2022	0.0184	0.0103	0.2073	1					
Coworkers	0.3875*	0.3681*	0.3318*	0.4694*	0.3527*	-0.0688	0.3986*	0.2806	0.5773*	0.4592*	1				
Work-Nat	0.5683*	0.6013*	0.6425*	0.6080*	-0.0057	-0.0138	0.4889*	0.0728	0.4253*	0.3098	0.4283*	1			
COMM	0.4452*	0.3278*	0.3825*	0.5233*	0.276	-0.0066	0.4675*	0.2005	0.5444*	0.3529*	0.5799*	0.5249*	1		
EI	0.7196*	0.7688*	0.7379*	0.8358*	0.0292	-0.0653	0.3503*	-0.0255	0.3846*	0.2519	0.4607*	0.7556*	0.5138*	1	
Job-Sat	0.3884*	0.3097	0.2638	0.4659*	0.7202*	0.4000*	0.4871*	0.5856*	0.8571*	0.4193*	0.6815*	0.4822*	0.6399*	0.4087*	1

Statistical significance denoted by * following Correlation

Appendix K. Detailed Survey Results Matrices

Age Survey Sample – Under 50

<50 Sample	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe bene	Contingent	Oper. Cond.	Co-workers	Nature of work	COMM	EI TOTAL	Job Sat Total	Survey Total
Mean	5.610	5.364	6.152	4.985	3.212	3.576	5.742	3.705	4.280	4.076	5.212	5.826	4.500	5.471	4.459	4.919
STDEV	1.554	1.504	1.216	1.496	1.918	1.663	1.385	1.772	1.749	1.665	1.653	1.245	1.732	1.577	1.875	1.816
Sample Mean STDEV	0.991	0.755	0.727	0.762	1.371	1.338	1.030	1.390	1.424	1.074	1.125	1.003	1.149	0.542	0.878	0.573
Question Mean STDEV	0.646	0.556	0.260	0.518	0.810	0.249	0.491	0.302	0.548	0.709	0.658	0.134	0.417	0.854	1.016	1.067
Alpha	0.755	0.412	0.556	0.419	0.584	0.631	0.599	0.612	0.663	0.484	0.530	0.628	0.458	0.817	0.935	0.924

Under 50 (n=33)	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe Bene	Cont-Rew	Oper. Cond	Co-workers	Work Nature	COMM	EI	Job-Sat
EMO	1														
SC	0.4460*	1													
WB	0.2469	0.3655*	1												
SOC	-0.0386	0.343	0.2546	1											
Pay	0.0435	0.1778	0.4692*	0.0323	1										
PROMO	-0.0183	-0.0702	0.1653	-0.04	0.6060*	1									
SUPER	0.3980*	0.1286	0.2199	-0.1945	0.4659*	0.4470*	1								
Fringe Ben	0.1574	0.1161	0.264	0.0212	0.5212*	0.5604*	0.2972	1							
Cont-Rew	0.0823	0.2246	0.3928*	0.1339	0.7935*	0.6597*	0.3908*	0.6579*	1						
Oper. Cond	0.1496	0.4687*	0.2655	0.1487	0.5561*	0.3311	0.4414*	0.1885	0.6098*	1					
Coworkers	0.3341	0.4669*	0.4141*	0.135	0.5596*	0.321	0.4514*	0.4351*	0.6813*	0.6414*	1				
Work-Nat	0.1971	0.3869*	0.5850*	0.0675	0.7790*	0.4508*	0.4918*	0.3510*	0.7584*	0.7162*	0.6631*	1			
COMM	0.3223	0.1743	0.2262	0.046	0.5160*	0.4253*	0.6861*	0.3949*	0.6263*	0.4324*	0.7008*	0.4649*	1		
EI	0.6559*	0.8250*	0.5677*	0.5434*	0.136	-0.0423	0.1788	0.1032	0.2116	0.3483*	0.4519*	0.3661*	0.2632	1	
Job-Sat	0.2102	0.2889	0.4069*	0.0541	0.8490*	0.6840*	0.6430*	0.6915*	0.9152*	0.6744*	0.7708*	0.8169*	0.7293*	0.2628	1

Statistical significance denoted by * following Correlation

Appendix K. Detailed Survey Results Matrices

Age Survey Sample – Over 50

50+ Sample	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe bene	Contingent	Oper. Cond.	Co-workers	Nature of work	COMM	EI TOTAL	Job Sat Total	Survey Total
Mean	5.726	5.365	6.023	5.104	3.108	3.865	5.365	3.709	4.236	4.176	5.257	5.831	4.635	5.513	4.465	4.941
STDEV	1.398	1.429	1.131	1.346	1.796	1.733	1.808	1.583	1.684	1.776	1.471	1.214	1.596	1.465	1.834	1.755
Sample Mean STDEV	0.837	0.744	0.692	0.788	1.374	1.347	1.324	1.176	1.228	1.287	1.130	0.911	1.057	0.591	0.787	0.605
Question Mean STDEV	0.270	0.537	0.195	0.347	0.722	0.428	0.314	0.440	0.525	0.520	0.398	0.163	0.307	0.746	0.932	0.996
Alpha	0.672	0.458	0.571	0.545	0.634	0.614	0.550	0.580	0.570	0.561	0.607	0.568	0.446	0.866	0.909	0.936

50+ (n=35)	EMO	SC	WB	SOC	Pay	PROMO	SUPER	Fringe Bene	Cont-Rew	Oper. Cond	Co-workers	Work Nature	COMM	EI	Job-Sat
EMO	1														
SC	0.4304*	1													
WB	0.4666*	0.5773*	1												
SOC	0.7419*	0.5210*	0.3645*	1											
Pay	0.0004	0.1383	-0.1793	0.1244	1										
PROMO	0.0249	-0.1074	-0.2944	0.0923	0.3965*	1									
SUPER	0.3008	0.3159	0.4646*	0.4643*	0.073	0.2727	1								
Fringe Ben	-0.0567	-0.071	-0.1393	-0.0201	0.6889*	0.3088	-0.0958	1							
Cont-Rew	0.269	0.2123	0.1514	0.3850*	0.6335*	0.3522*	0.4624*	0.4369*	1						
Oper. Cond	0.0999	0.2755	0.0123	0.1809	0.3717*	-0.1345	-0.1226	0.2363	0.2267	1					
Coworkers	0.3591*	0.4266*	0.4114*	0.5169*	0.3399*	-0.035	0.4722*	0.223	0.6282*	0.4164*	1				
Work-Nat	0.6134*	0.4717*	0.6853*	0.5715*	0.0217	0.0343	0.5646*	0.017	0.4680*	0.2162	0.5301*	1			
COMM	0.4151*	0.3293	0.2086	0.4804*	0.1549	0.0095	0.4564*	0.0348	0.4989*	0.3989*	0.4970*	0.5125*	1		
EI	0.8571*	0.7036*	0.6995*	0.8582*	-0.0177	0.0126	0.5010*	-0.1349	0.2831	0.1108	0.4972*	0.7212*	0.4292*	1	
Job-Sat	0.3442*	0.3155	0.1608	0.4789*	0.6823*	0.4436*	0.5470*	0.5027*	0.8811*	0.4483*	0.6979*	0.5467*	0.5921*	0.3896*	1

Statistical significance denoted by * following Correlation

References

References

Abraham, R. (2000). The Role of Job Control as a Moderator of Emotional Dissonance and Emotional Intelligence-Outcome Relationships. *The Journal of Psychology*, *134*(2), 169-184.

Ainley, M. (2006). Connecting with learning: motivation, affect, and cognition. *Educational Psychology Review*, *18*, 391-405.

Albaum, G. (1997). The Likert Scale Revisited: An Alternate Version. *Journal of the Market Research Society*, *39*(2), 331-348.

Allen, E. I., & Seaman, J. (2010). *Class Differences: Online Education in the United States*. Newburyport, MA: Babson Survey Research Group and Quahog Research Group, LLC.

Allen, E. I., & Seaman, J. (2013). *Changing Course: Ten Years of Tracking Online Education in the United States*. Newburyport, MA: Babson Survey Research Group and Quahog Research Group, LLC.

Alonzo, M., & Aiken, M. (2004). Flaming in electronic communication. *Decision Support Systems*, *36*(3), 205-213.

Anari, N. N. (2012). Teachers: Emotional Intelligence, Job Satisfaction, and Organizational Commitment. *Journal of Workplace Learning*, *24*(4), 256-269.

Antonakis, J. (2003). Why "Emotional Intelligence" Does Not Predict Leadership Effectiveness: A Comment on Prati, Douglas, Ferris, Ammeter, and Buckley. *The International Joumal of Organizational*

Analysis, *11*, 355-361.

Antonakis, J. (2004). On Why "Emotional Intelligence" Will Not Predict Leadership Effectiveness Beyond IQ or the "Big Five": An Extension and Rejoinder. *The International Journal of Organizational Analysis*, *12*(2), 171-182.

Austin, E. J. (2005). Emotional intelligence and emotional information processing. *Personality and Individual Differences*, *39*, 403-414.

Austin, E. J., Parker, J. D. A., Petrides, K. V., & Saklofske, D. H. (2008). *The SAGE Handbook of Personality Theory and Testing Vol 1: Personality Theories and Models.*

Balch, P. (1999). Part-Time Faculty are Here to Stay. *Planning for Higher Education*, *27*(3), 32-41.

Balzer, W. K., Kihm, J. A., Smith, P. C., Irwin, J. L., Bachiochi, P. D., Robie, C., & Parra, L. F. (2000). *Users Manual for the Job Descriptive Index (JDI: 1997 version) and the Job in General Scales.* Bowling Green State University.

Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory.* Englewood Cliffs, NJ: Prentice-Hall.

Bar-On, & Parker, J. (2000). *The handbook of emotional intelligence: theory, development, assessment, and application at home, school, and in the workplace.* San Francisco,CA: Jossey-Bass.

Bar-On, R. (1988). *The Development of a Concept of Psychological Well-Being.* Rhodes University, South Africa.

Bar-On, R. (1997). *Bar-On Emotional Quotient Inventory (EQ-i): A Test of Emotional Intelligence.* Toronto, Canada: Multi-health systems Inc.

Bar-On, R. (2004). *Applying the Power of Emotional Intelligence* [Paper]. Golden, CO.

Bar-On, R. (2006). The Bar-On Model of Emotional-Social Intelligence (ESI). *Psicothema*, *18 (supl)*, 13-25.

Bar-On, R. (2010). Emotional Intelligence: An Integral Part of Positive Psychology. *South African Journal of Psychology*, *40*(1), 54-62.

Bennouna, S. (2004). *Mentors' Emotional Intelligence and Performance of Mentoring Functions in Doctoral Education.* University of South Florida, Tampa.

Bidjerano, T. (2005). *Gender Differences in Self-Regulated Learning.* Kerhonkson, NY, USA.

Block, N. J., & Dworkin, G. (1976). *The IQ Controversy.* New York: Pantheon.

Blum, K. (1999). Gender differences in asynchronous learning in higher education: learning styles, participation barriers and communication patterns. *Journal of Asynchronous Learning Networks*, *3*(1).

Bollinger, D. U., & Wasilik, O. (2009). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Distance Education*, *30*(1), 103-116.

Boring, E. G. (1923). Intelligence as the Tests Test It. *New Republic*,

35-37.

Boyatzis, R., Goleman, D., & Rhee, K. (2000). Clustering Competence in Emotional Intelligence: Insights from the Emotional Competency Inventory (ECI).

Boyatzis, R., & McKee, A. (2002). *Primal Leadership: Learning to Lead with Emotional Intelligence*. Boston, MA: Harvard Business School Publishing.

Boyatzis, R. E., & Goleman, D. (2007). *Emotional Compentency Inventory (Now the Emotional and Social Competency Inventory)*. Boston, MA: Hay Group.

Boyatzis, R. E., Stubbs, E. C., & Taylor, S. N. (2002). Learning Cognitive and Emotional Intelligence Competencies Through Graduate Management Education. *Academy of Management Learning and Education*, *1*(2), 150-162.

Brackett, M. A., & Salovey, P. (2003). Convergent, Discriminant and Incremental Validity of Competing Measures of Emotional Intelligence. *Personality and Social Psychology Bulletin*, *29*, 1147-1158.

Brackett, M. A., & Salovey, P. (2006). Measuring Emotional Intelligence with the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). *Psicothema*, *18*, 34-41.

Braun, J. R. (1962). Effects of a top management faking set on the Gordon Personal Inventory. *Psychological Reports*, *10*, 611-614.

Brenner, J. (2012). *Social Networking.* Retrieved from http://pewinternet.org/Commentary/2012/March/Pew-Internet-Social-Networking-full-detail.aspx

Brody, N. (2004). What cognitive intelligence is and what emotional intelligence is not. *Psychological Inquiry*, *15*, 234-238.

Brotheridge, C. M. (2006). The role of emotional intelligence and other individual difference variables in predicting emotional labor relative to situational demands. *Psicothema*, *18*, 139-144.

Brown, J. S., & Duguid, P. (2000). *The Social Life of Information.* Boston, MA.

Bruckman, A. S. (1993). *Gender Swapping on the Internet.* Retrieved from http://www.cc.gatech.edu/~asb/papers/gender-swapping.txt

Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes,behavior and outcomes: an examination among senior managers. *Journal of Managerial Psychology*, *18*(8), 788-813. doi: 10.1108/02683940310511881

Carmeli, A., Yitzhak-Halevy, M., & Weisberg, J. (2009). The Relationship between Emotional Intelligence and Psychological Well Being. *Journal of Managerial Psychology*, *24*, 66-78. doi: 10.1108/02683940910922546

Caruso, D. R., Mayer, J. D., & Salovey, P. (2002). Relationship of an ability measure of emotional intelligence to personality. *Journal of Personality Assessment*, *79*, 306-320.

Caruso, J. C., & Cliff, N. (1997). Empirical size, coverage, and power of confidence intervals for Spearman's rho. *Education and Psychological Measures*, *57*, 637-654.

Chang, S. H. H., & Smith, R. A. (2006). Effectiveness of personal integration in a learner-centered paradigm distance education class based on student satisfaction. *Journal of Research on Technology in Education*.

Chapin, F. S. (1942). Preliminary standardization of a social impact scale. *American Sociological Review*, *7*, 214-225.

Charbonneau, D., & Nicol, A. A. M. (2002). Emotional intelligence and leadership in adolescents. *Personality and Individual Differences*, *33*, 1101-1113.

Cherniss, C. (2010). Emotional intelligence: Toward clarification of a concept. *Industrial And Organizational Psychology: Perspectives On Science And Practice*, *3*(2), 110-126.

Cherniss, C., & Adler, M. (2000). *Promoting emotional intelligence in organizations.* Alexandria, VA: American Society for Training and Development.

Cherniss, C., Extein, M., Goleman, D., & Weissberg, R. P. (2006). Emotional intelligence: What does the research really indicate? *Educational Psychologist*, *41*, 239-245.

Cherniss, C., & Goleman, D. (2001). *The Emotionally Intelligent Workplace.* San Francisco, CA: Jossey-Bass.

Chia, Y. M. (2005). Job offers of multi-national accounting firms: The effects of emotional intelligence, extra-curricular activities, and academic performance. *Accounting Education*, *86*(7), 75-93.

Chyung, S. Y. (2001). Systematic and systemic approaches to reducing attrition rates in online higher education. *The American Journal of Distance Education*, *15*(3), 36-49.

Ciarrochi, J., Chan, A., & Caputi, P. (2000). A Critical Evaluation of the Emotional Intelligence Construct. *Personality and Individual Differences*, *28*, 539-561.

Ciarrochi, J., Deane, F. P., & Anderson, S. (2002). Emotional Intelligence Moderates the Relationship Between Stress and Mental Health. *Personality and Individual Differences*, *32*, 197-209.

Clark, R. C., & Mayer, R. E. (2002). *E-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning*. San Francisco, CA: Jossey-Bass Pfeiffer.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Cohen, J. (1992). A Power Primer. *Psychological Bulletin*, *112*(1), 155-159.

Conceicao, S. C. O. (2006). Faculty lived experiences in the online environment. *Adult Education Quarterly*, *57*(1), 26-45.

Connolly, J., & Viswesvaran, C. (2000). The role of affectivity in job satisfaction: A meta-analysis. *Personality and Individual Differences*,

29(2), 265-281. doi: 10.1016/S01918869(99)00192-0

Conole, G., Dyke, M., Oliver, M., & Seale, J. (2004). Mapping Pedagogy and Tools for Effective Learning Design. *Computers and Education*, *43*(1-2), 17-33.

Conte, J. M. (2005). A Review and Critique of Emotional Intelligence Measures. *Journal of Organizational Behavior*, *26*(4), 433-440.

Cook, R., Ley, K., Crawford, C., & Warner, A. (2009). Motivators and Inhibitors for University Faculty in Distance and E-Learning. *British Journal of Educational Technology*, *40*(1), 149-163.

Cooley, M. T. (2012). *Survey of Emotions in Online Settings. Pilot Study of Graduate Students at the University of New Mexico* [unpublished].

Cooper, A., & Petrides, K. V. (2010). A Psychometric Analysis of the Trait Emotional Intelligence Questionnaire–Short Form (TEIQue–SF) using Item Response Theory. *Journal of Personality Assessment*, *92*, 449-457.

Cooper, D. R., & Schindler, P. S. (2008). *Business Research Methods* (10th ed.). New York: McGraw-Hill/Irwin.

Cooper, J., & Weaver, K. D. (2003). *Gender and Computers: Understanding the Digital Divide*. Mahwah, NJ: Psychology Press.

Cooper, R. K., & Sawaf, A. (1997). *Executive EQ: Emotional Intelligence in Leadership and Organizations*. New York, NY: Grosset/Putman.

Covington, D., Petherbridge, D., & Warren, S. E. (2005). Best Practices: A Triangulated Support Approach in Transitioning Faculty to Online

Teaching. *Online Journal of Distance Learning Administration*, *8*(1).

Crawford, C. M., & Cook, R. G. (2008). Creating and Sustaining Communities of Learning within Distance Learning Environments: Focusing Upon Making Connections, Creating Communities of Learning, and Responsibilities. *The International Journal of Learning*, *15*(2).

Creswell, J. W. (1998). *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. Thousand Oaks, CA: Sage.

Creswell, J. W. (2002). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. Upper Saddle River, NJ: Merrill Prentice Hall.

Crocco, M. S., Cramer, J., & Meier, E. B. (2008). (Never) Mind the Gap! Gender Equity in Social Studies Research on Technology in the Twenty-first Century. *Multicultural Education & Technology Journal*, *2*(1), 19-36.

Daus, C. S., & Ashkanasy, N. M. (2005). The Case for the Ability-Based Model of Emotional Intelligence in Organizational Behavior. *Journal of Organizational Behavior*, *26*, 453-466. doi: 10.1002/job.321

Day, A. L., & Carroll, S. A. (2004). Using an Ability-Based Measure of Emotional Intelligence to Predict Individual Performance, Group Performance and Group Citizenship Behaviors. *Personality and Individual Differences*, *36*(6), 1443-1458.

Detterman, D. R. (1983). Does "g" exist? *Intelligence*, *6*, 99-108.

Doll, E. A. (1935). A Generic Scale of Social Maturity. *American Journal of Orthopsychiatry*, *5*, 180-188.

Downey, J. (2008). Hierarchy and Happiness: The Influence of Emotion on Administrative Job Satisfaction. *Community College Journal of Research and Practice*, *32*(8), 597-606. doi: 10.1080/10668920600859996

Dunnett, S., Koun, S., & Barber, P. J. (1981). Social Desirability in the Eysenck Personality Inventory. *British Journal of Psychology*, *72*, 19-26.

Emmerling, R. J., & Goleman, D. (2005). Leading with emotion: Emotional intelligence predicts success. *Leadership Excellence*, *22*(7), 9-10.

Engelberg, E., & Sjöberg, L. (2004). Emotional Intelligence, Affect Intensity, and Social Adjustment. *Personality and Individual Differences*, *37*(3), 533-542. doi: 10.1016/j.paid.2003.09.024

Erskine, E. B. (2012). *Effective online instructors and emotional intelligence*. Unpublished doctoral dissertation.

Fatt, J. P. T., & Howe, I. C. K. (2003). Emotional intelligence of foreign and local university students in Singapore: Implications for managers. *Journal of Business and Psychology*, *17*(3), 345-367.

Feldman, D. (1999). *The Handbook of Emotionally Intelligent Leadership*. Falls Church, VA: Leadership Performance Solutions.

Finucane, M. C., & Algren, M. E. (1997). *A Pilot Study Investigation of the Socialization of Part-Time Faculty Members in Academic Settings*

(Vol. ED 424 596). ERIC Document Reproduction Service.

Fisher, M. (2003). *Competition in the Classroom: Sex Differences in Perceptions and Preferences* (Tech. Rep.).

Fisher, M., & Baird, D. E. (2005). Online Learning Design that Fosters Student Support, Self-Regulation, and Retention. *Campus-Wide Information Systems*, *22*(5), 88-107.

Frederickson, B. L. (1998). What good are positive emotions? *Review of General Psychology*, *2*, 300-319.

French, S., & Richardson, H. (2005). Opting Out? Women and Online Learning. *Computers and Society*, *35*(2), 2-2.

Freudenthaler, H. H., Neubauer, A. C., & Haller, U. (2008). Emotional intelligence: Instruction effects and sex differences in emotional management abilities. *Journal of Individual Differences*, *29*, 105-115.

Froman, L. (2010). Positive Psychology in the Workplace. *Journal of Adult Development*, *17*, 59-69. doi: 10.1007/s10804-009-9080-0.

Furnham, A. (1986). Response Bias, Social Desirability and Dissimulation. *Journal of Personality and Individual Differences*, *7*(3), 385–400.

Gaertner, S. (1999). Structural Determinants of Job Satisfaction and Organizational Commitment in Turnover Models. *Human Resource Management Review*, *9*, 479-493.

Gagne', R. M., Briggs, L. J., & Wager, W. W. (1992). *Principles of Instructional Design* (4th ed.). Forth Worth, TX: Harcourt Brace Jovanovich College Publishers.

Gappa, J. M. (2000). The New Faculty Majority: Somewhat Satisfied but not Eligible for Tenure. *New Directions for Institutional Research*, *27*(1), 77-86.

Gardner, H. (1983). *Frames of Mind: The Theory of Multiple Intelligences.* New York: Basic Books.

Gardner, K. J., & Qualter, P. (2010). Concurrent and Incremental Validity of Three Trait Emotional Intelligence Measures. *Australian Journal of Psychology*, *62*(1), 5-13. doi: 10.1080/00049530903312857

Gay, L. R., Mills, G. E., & Airasian, P. (2009). *Educational Research: Competencies for Analysis and Application* (9th ed.). Ohio: Pearson Prentice Hall.

Gibbs, N. (1995, October 2). Emotional Intelligence: The EQ Factor. *TIME Magazine*, *146*(14).

Gladwell, M. (2006). *The tipping point: how little things can make a big difference.* Hachette Digital, Inc.

Glaser, B., & Strauss, A. (1967). *The Discovery of Grounded Theory.* Hawthorne, NY: Aldine Publishing Company.

Gliner, J., & Morgan, G. (2000). *Research Methods in Applied Settings: An Integrated Approach to Design and Analysis.* Mahwah, NJ: Lawrence Erlbaum.

Goetz, T., Nett, U. E., Martiny, S. E., Hall, N. C., Pekrun, R., S., D., & Trautwein, U. (2012). Students' Emotions During Homework: Structures, Self-Concept Antecedents and Achievement Outcomes.

Learning and Individual Difference, *22*(2), 225-234.

Goldenberg, I., Matheson, K., & Mantler, J. (2006). The Assessment of Emotional Intelligence: A Comparison of Performance-Based and Self-Report Methodologies. *Journal of Personality Assessment*, *86*, 33-45.

Goleman, D. (1995). *Emotional Intelligence: Why It Can Matter More Than IQ*. New York, NY: Bloomsbury Publishing.

Goleman, D. (1998). *Working with Emotional Intelligence*. London, UK: Bloomsbury Publishing.

Goleman, D. (2000). Leadership That Gets Results. *Harvard Business Review*.

Goleman, D. (2011). *The Brain and Emotional Intelligence New Insights*. Northampton, MA: More Than Sound.

Goleman, D., Boyatzis, R., & McKee, A. (2001). Primal Leadership: The Hidden Driver of Great Performance. *HBR On Point*, 40-51.

Goleman, D., Boyatzis, R., & McKee, A. (2002). *Primal Leadership: Realizing the Power of Emotional Intelligence*. Boston, MA: Harvard Business School Press.

Groves, K. S., McEnrue, P., & Shen, W. (2008). Developing and Measuring Emotional Intelligence of Leaders. *Journal of Management Development*, *27*, 225-250. doi: 10.1108/02621710810849353

Guadagno, R. E., & Cialdini, R. B. (2002). Online Persuasion: An Examination of Gender Differences in Computer-Mediated

Interpersonal Influence. *Group Dynamics*, *6*(1), 38-51.

Guilford, J. P. (1967). *The Nature of Human Intelligence*. New York: McGraw-Hill.

Gunawardena, C. L., Ortegano-Layne, L., Carabajal, K., Frechette, C., Lindemann, K., & Jennings, B. (2006). New Model, New Strategies: Instructional Design for Building Online Wisdom Communities. *Distance Education*, *27*(2), 217-232. doi: 10.1080/01587910600789613

Gunn, C., McSporran, M., Macleod, H., & French, S. (2003). Dominant or Different? Gender Issues in Computer Supported Learning. *Journal of Asynchronous Learning Networks*, *7*(1), 14-30.

Hajj, R. A., & Dagher, G. (2010). An Empirical Investigation of the Relation Between Emotional Intelligence and Job Satisfaction In The Lebanese Service Industry. *The Business Review, Cambridge*, *16*(2).

Harding, K. (2007). *On Being a No-Name Blogger Using Her Real Name* (No. 14). Retrieved from http://kateharding.net/2007/04/14/on-being-a-no-name-blogger-using-her-real-name/

Hart, J. L. (2006). *A Cross-Cultural Study of Principals' Leadership Behaviors According to Teachers' Perceptions* [Doctoral dissertation]. Retrieved from http://search.proquest.com/docview/304965636?accountid=12101

Haskett, R. (2003). *Emotional Intelligence and Teaching Success in Higher Education.*

Herring, S., Johnson, D., & DiBenedetto, T. (1995). This Discussion is Going Too Far! Male Resistance to Female Participation on the Internet. In K. Bucholtzand M. Hall (Ed.), *Gender articulated: Language and the socially constructed self* (p. 67-96). New York: Routledge.

Herring, S. C. (1999). The Rhetorical Dynamics of Gender Harassment Online. *The Information Society*, *15*(3), 151-167.

Herring, S. C. (2002). Computer-Mediated Communication and the Internet. In B. Cronin (Ed.), *Annual Review of Information Science and Technology 36* (p. 109-168). Medford, NJ: Information Today Inc./American Society for Information Science and Technology.

Herring, S. C. (2004). Who's got the Floor in Computer-Mediated Conversations? Edelsky's Gender Patterns Revisited. In S. Herring (Ed.), *Computer-Mediated Conversation.* Cresskill, NJ: Hampton Press.

Herring, S. C. (2010). *Who's Got the Floor in Computer-Mediated Conversation? Edelsky's Gender Patterns Revisited.* Retrieved from http://www.languageatinternet.org/articles/2010/2857

Herring, S. C., & Paolillo, J. C. (2006). Gender and Genre Variation in Weblogs. *Journal of Sociolinguistics*, *10*(4), 439-459.

Herring, S. C., & Zelenkauskaite, A. (2008). Gendered Typography: Abbreviation and Insertion in Italian iTV SMS. In J. F. Siegel, T. C. Nagel, A. Laurente-Lapole, & J. Auger (Eds.), *IUWPL7:*

Gender in Language: Classic Questions, New Contexts (p. 73-92). Bloomington, IN: IULC Publications. Retrieved from http://ella.slis.indiana.edu/~herring/iuwpl.2008.pdf

Herzberg, F., Mausner, B., & Snyderman, B. B. (1967). *The Motivation to Work*. New York: Johns Wiley & Sons, Inc.

Hinshaw, R., Burden, R., & Shriner, M. (2012). Supporting Post-Graduates' Skill Acquisition Using Components of Constructivism and Social Learning Theory. *Creative Education*, *3*, 874-877. doi: 10.4236/ce.2012.326131

Hogan, R. L., & McKnight, M. A. (2007). Exploring Burnout among University Online Instructors: An Initial Investigation. *Internet and Higher Education*, *10*(2), 117–124.

Holcomb, L. B., King, F. B., & Brown, S. W. (2004). Student Traits and Attributes Contributing to Success in Online Courses: Evaluation of University Online Courses. *Journal of Interactive Online Learning*, *2*(3).

Hollingworth, H. L. (1910). The Central Tendency of Judgment. *J Philos Psych Sci Meth*, *7*, 461-469.

Holt, S., & Jones, S. (2005). Emotional Intelligence and Organizational Performance: Implications for Performance Consultants and Educators. *Performance Improvement*, *44*(10), 15-22.

Horovitz, B. (2012). *After Gen X, Millennials, what should the next generation be?*

Hough, L. M., Eaton, N. K., Dunnette, M. D., Ramp, J. D., & McCloy, R. A. (1990). Criterion-Related Validities of Personality Constructs and the Effect of Response Distortion on those Validities. *Journal of Applied Psychology Monographs*, *75*, 581-595.

Howell, D. C. (2008). *Fundamental Statistics for the Behavioral Sciences* (6th ed.). Belmont, CA: Thompson Wadsworth.

Howell, D. C. (2010). *Fundamental Statistics for the Behavioral Sciences.* Belmont, CA: Wadsworth/Cengage Learning.

Howland, J., & Moore, J. (2002). Student Perceptions as Distance Learners in Internet Based Courses. *Distance Education*, *23*(2), 183-195.

Hulin, C. (1971). Individual Differences and Job Enrichment: The Case Against General Treatments. In *New Perspectives in Job Enrichment* (p. 159–191). New York: Van Nostrand Rheinhold.

Imel, S. (2003). *Effects of Emotions on Learning in Adult, Career, and Career-Technical Education* [Electronic Article]. Retrieved from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1a

Issac, S., & Michael, W. B. (1995). *Handbook in Research and Evaluation* (3rd ed.). San Diego, CA: Educational and Industrial Testing Services.

Izizarry, R. (2002). Self-Efficacy & Motivation Effects on Online Psychology Student Retention. *USDLA Journal*, *16*(12), 55-64.

Jaeger, A. J. (2003). Job Competencies and the Curriculum: An Inquiry

into Emotional Intelligence in Graduate Professional Education. *Research in Higher Education*, *44*(6), 615-619.

Jaggars, S. S. (2012). *Beyond Flexibility: Why Students Choose Online Courses in Community College.*

Jamieson, S. (2004). Likert Scales: how to (ab)use them. *Medical Education*, *38*(12), 1217-1218.

Jarvela, S., Volet, S. E., & Jarvenoja, H. (2010). Research on Motivation in Collaborative Learning: Moving Beyond the Cognitive-Situative Divide and Combining Individual and Social Processes. *Educational Psychologist*, *45*(1), 15-27.

Johnson, H. M., & Spector, P. E. (2007). Service With a Smile: Do Emotional Intelligence, Gender, and Autonomy Moderate the Emotional Labor Process? *Journal of Occupational Health Psychology*, *12*, 319-333.

Jordan, P. J., Ashkanasy, N. M., & Hartel, C. E. J. (2002). Emotional Intelligence as a Moderator of Emotional and Behavioral Reactions to Job Insecurity. *Academy of Management Review*, *27*, 1-12.

Joughlin, L. (1969). *Academic freedom and tenure.* Madison: U. of Wisc. Press.

Judge, T. A. (2009). Core Self-Evaluations and Work Success. *Psychological Science*, *18*(1), 58-62.

Judge, T. A., & Bono, J. (2001). Relationship of core self-evaluations traits–self-esteem, generalized self-efficacy, locus of control, and

emotional stability–with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, *86*(1), 80-92. doi: 10.1037//0021-9010.86.1.80

Judge, T. A., Heller, D., & Klinger, R. (2008). The Dispositional Sources of Job Satisfaction: A Comparative Test. *Applied Psychology*, *57*(3), 361-372. doi: 10.1111/j.1464-0597.2007.00318.x

Judge, T. A., & Larsen, R. (2001). Dispositional Affect and Job Satisfaction: A Review and Theoretical Extension. *Organizational Behavior and Human Decision Processes*, *86*(1), 67-98. doi: 10.1006/obhd.2001.2973

Judge, T. A., Locke, E., Durham, C. C., & Kluger, A. (1998). Dispositional Effects on Job and Life Satisfaction: The Role of Core Evaluations. *Journal of Applied Psychology*, *83*(1), 17-34. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/9494439

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The Job Satisfaction-Job Performance Relationship: A Qualitative and Quantitative Review. *Psychological bulletin*, *127*(3), 376-407.

Keashly, L., & Neuman, J. H. (2010). Faculty Experiences with Bullying in Higher Education. *Administrative Theory & Praxis*, *32*(1), 48-70.

Kemp, W. C. (2002). Persistence of Adult Learners in Distance Education. *American Journal of Distance Education*, *16*(2), 65-81.

Kerr, R., Garvin, J., Heaton, N., & Boyle, E. (2006). Emotional Intelligence and Leadership Effectiveness. *Leadership & Organization*

Development Journal, *27*(4), 265-279.

Kiesler, S., & Sproull, L. (1992). Group Decision Making and Communication Technology. *Organizational Behavior and Human Decision Processes*, *52*(1), 96-123.

Kimmel, K., & Volet, S. E. (2012). Editorial Introduction: Motivation and Learning in Multiple Contexts. *European Journal of Psychology of Education*, *27*(2), 155-160.

Kirch, D. P., Tucker, M. L., & Kirch, C. (2001). The Benefits of Emotional Intelligence in Accounting Firms. *The CPA Journal*, *71*(8), 60-61.

Kluemper, D. (2008). Trait Emotional Intelligence: The Impact of Core-Self Evaluations and Social Desirability. *Personality and Individual Differences*, *44*(6), 1402-1412. doi: 10.1016/j.paid.2007.12.008

Knotts, D. (2013). [Interview].

Kramarae, C. (2003). Gender Equity Online, When There is No Door to Knock On. In D. Moore & W. Anderson (Eds.), *Handbook of Distance Education* (p. 261-272). Mahwah, NJ: Lawrence Erlbaum.

Lambert, E. G., Hogan, N. L., Elechi, O., Jiang, S., Laux, J. M., Dupuy, P., & Morris, A. (2009). A Further Examination of Antecedents of Correctional Staff Life Satisfaction. *The Social Science Journal*, *46*, 689-706.

Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge, UK: Cambridge University Press.

Le Doux, J. (1998). *The Emotional Brain: The Mysterious Underpinnings*

of Emotional Life. New York: Simon and Schuster.

Leedy, P. D., & Ormrod, J. E. (2005). *Practical Research: Planning and Design* (8th ed.). Upper Saddle River, NJ: Prentice Hall.

Leeper, R. (1948). A Motivational Theory of Emotions to Replace Emotions as Disorganized Responses. *Psychological Review*, *55*, 5-21.

Lencioni, P., Bradbury, T., & Greaves, J. (2009). *Emotional Intelligence 2.0.* San Diego, CA: TalentSmart.

Lewin, T., & Markoff, J. (2013). *California to Give Web Courses a Big Trial.* Retrieved from www.nytimes.com

Linnenbrink-Garcia, L., Rogat, T., & Koskey, K. K. (2011). Affect and Engagement During Small Group Instruction. *Contemporary Educational Psychology*, *36*(1), 13-24.

Liu, J. (2013). *The Conference Board Global Productivity Slowdown in 2013* (Nos. January 14, 2014). Retrieved from www.conferenceboard.com

Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of Industrial and Organizational Psychology.* Chicago: Rand McNally.

Locke, E. A. (2005). Why Emotional Intelligence is an Invalid Concept. *Journal of Organizational Behavior*, *26*(4), 425–431. doi: 10.1002/job.318.

Lopes, P. N., Grewal, D., Kadis, J., Gall, M., & Salovey, P. (2006). Evidence that Emotional Intelligence is Related to Job Performance and Affect and Attitudes at Work. *Psicothema*, *18*(Suppl), 132–138.

Lore, N. A. (1998). *The Pathfinder*. New York: Fireside Books.

Low, G. R., & Nelson, D. B. (2005). *Emotional Intelligence: The Role of Transformative Learning in Academic Excellence* (Tech. Rep.). TEXAS STUDY.

MacCann, C., Matthews, G., Zeidner, M., & Roberts, R. D. (2003). Psychological Assessment of Emotional Intelligence: A Review of Self-report and Performance-based Testing. *International Journal of Organizational Analysis*, *11*(3), 247–274.

MacCann, C., Roberts, R. D., Matthews, G., & Zeidner, M. (2004). Consensus Scoring and Empirical Option Weighting of Performance-Based Emotional Intelligence (EI) Tests. *Personality and Individual Differences*, *36*, 645-662.

MacLean, J. (2006). Forgotten Faculty: Stress and Job Satisfaction Among Distance Educators. *Online Journal of Distance Learning Administration*, *9*(2). Retrieved from http://www.westga.edu/\%7Edistance/ojdla/summer92/mclean92.htm

Mandell, B., & Pherwani, S. (2003). Relationship between Emotional Intelligence and Transformational Leadership Style: A Gender Comparison. *Journal of Business and Psychology*, *17*(3), 387-404.

Marques, J. F. (2006). The spiritual worker: An examination of the ripple effect that enhances quality of life in and outside the work environment. *Journal of Management Development*, *25*(9), 884-895.

Martins, A., Ramalho, N., & Morin, E. (2010). A Comprehensive

Meta-Analysis of the Relationship between Emotional Intelligence and Health. *Personality and Individual Differences*, *49*(6), 554–564. doi: 10.1016/j.paid.2010.05.029

Marwick, A. (2013). *Donglegate: Why the Tech Community Hates Feminists.* Wired. Retrieved from http://www.wired.com/opinion/2013/03/richards-affair-and-misogyny-in-tech/

Maslow, A. H. (1943). A Theory of Human Motivation. *Psychological Review*, *50*, 370-396.

Maslow, A. H. (1954). *Motivation and Personality.* New York: Harper and Brothers.

Maslow, A. H. (1971). *The Farther Reaches of Human Nature.* New York: The Viking Press.

Mayer, J. D., Barsade, S., & Roberts, R. (2007). Human Abilities: Emotional Intelligence. *Annual Review of Psychology*, 507-536.

Mayer, J. D., & Mitchell, D. C. (1998). Intelligence as a Subsystem of Personality: From Spearman's g to Contemporary Models of Hot Processing. In W. Tomic & J. Kingma (Eds.), *Advances in Cognition and Educational Practice* (Vol. 5, p. 43-75). Greenwich, CT: JAI.

Mayer, J. D., & Salovey, P. (1997). What is Emotional Intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional Development and Emotional Intelligence: Implications for Educators* (p. 3-31). Basic Books: New York, NY.

Mayer, J. D., & Salovey, P. (2004). Social Intelligence (Emotional

Intelligence, Personal Intelligence). In C. Peterson & M. E. P. Seligman (Eds.), *Character Strengths and Virtues* (p. 337-353). Washington, DC: American Psychological Association.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2000). Models of Emotional Intelligence. In R. J. Sternberg (Ed.), *Handbook of Intelligence.* Cambridge: Cambridge University Press.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional Intelligence: Theory, Findings, and Implications. *Psychological Inquiry*, *15*, 197–215.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2008). Emotional Intelligence: New Ability or Eclectic Traits? *American Psychologist*, *63*, 503-517. doi: 10.1037/0003-066X.63.6.503

Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2001). Emotional Intelligence as a Standard Intelligence. *Emotion*, *1*, 232-242.

Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2003). Measuring Emotional Intelligence with the MSCEIT V2.0. *Emotion*, *3*, 97-105.

McClelland, D. C. (1973). Testing for Competence Rather Than for "Intelligence". *American Psychologist*, *28*(1), 1-14.

McSporran, M., & Young, S. (2001). *Does Gender Matter in Online Learning?* Retrieved from http://hyperdisc.unitec.ac.nz/research/ALTJpaper_9.pdf

Mercer, J. R. (1984). What is a Racially Nondiscriminatory Test? In C. R. Reynolds & R. T. Brown (Eds.), *Perspectives on Bias in Mental*

Testing. New York: Plenum Press.

Mertz, D. L. (2003). *Online Learning, Attrition, and Emotional Intelligence: Perspectives of Leaders in Online Teaching.* Unpublished doctoral dissertation.

Michinov, N., & Michinov, E. (2008). Face-to-Face Contact at the Midpoint of an Online Collaboration: Its Impact on the Patterns of Participation, Interaction, Affect, and Behavior Over Time. *Computers & Education*, *50*(4), 1540-1557.

Mikolajczak, M., Luminet, O., Leroy, C., & Roy, E. (2007). Psychometric Properties of the Trait Emotional Intelligence Questionnaire: Factor Structure, Reliability, Construct, and Incremental Validity in a French-Speaking Population. *Journal of Personality Assessment*, *88*, 338–353.

Milhoan, P. (2007). *Emotional Intelligence Competencies of Department Chairs in West Virginia State Community College System and Their Faculty Members' Perceptions of Organizational Climate.* Unpublished doctoral dissertation. Retrieved from http://wvuscholar.wvu.edu:8881//exlibris/dtl/d3_1/apache_media/L2V4bGlicmlzL2R0bC9kM18xL2FwYWNoZV9tZWRpYS8xMzU3Mw==.pdf

Mohamadkhani, K. (2010). An Emotional-Intelligence-Based Model for Improving Faculty Members' Effectiveness. *African Journal of Business Management*, *4*(14), 3086–3095.

Moore, M. G. (1993). Is Teaching like Flying? A Total Systems View of Distance Education. *American Journal of Distance Education*, *7*(1), 1-10.

Moore, M. G., & Kearsley, G. (2011). *Distance Education: A Systems View of Online Learning* (3rd ed.). Belmont, CA: Wadsworth/Cengage Publishers.

Morgan, G. A. (2004). *SPSS for Introductory Statistics: Use and Interpretation.* Mahwah, NJ: Lawrence Erlbaum Associates.

Mortiboys, A. (2012). *Teaching with Emotional Intelligence: A Step by Step Guide for Higher and Further Education Professionals* (2nd ed.). New York, NY: Routledge.

Moss, F. A., & Hunt, T. (1927). Are You Socially Intelligent? *Scientific American*, *137*, 108-110.

Mustafa, L. (2011). Emotional Intelligence Determining Work Attitudes and Outcomes of University Teachers: Evidence from Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, *2*(10), 240–260.

Nelis, D., Quoidbach, J., Mikolajczak, M., & Hansenne, M. (2009). Increasing Emotional Intelligence: (How) is it Possible? *Personality and Individual Differences*, *47*, 36-41.

Nelis, D., Quoidbach, J., Mikolajczak, M., & Hansenne, M. (2011). Measuring Individual Differences in Emotion Regulation: The Emotion Regulation Profile-Revised (ERP-R). *Psychologica Belgica.*

Neo, M. (2005). Web-Enhanced Learning: Engaging Students in Constructivist Learning. *Campus-Wide Information Systems*, *22*(1), 4-14. doi: 10.1108/10650740510574375

Niculescu-Mihai, C. E. (2008). *Emotional Intelligence and Academic Leadership: An Exploratory Study of College and University Presidents*. Minneapolis, MN: Capella University.

Nikolaou, I., & Tsaousis, I. (2002). Emotional Intelligence in the Workplace: Exploring its Effects on Occupational Stress and Organizational Commitment. *International Journal of Organizational Analysis*, *10*, 327-342.

Okpara, J. O., Squillace, M., & Erondu, E. A. (2005). Gender Differences and Job Satisfaction: A Study of University Teachers in the United States. *Women in Management Review*, *20*(3–4), 177–190.

Ooman-Early, J., & Murphy, L. (2009). Self-Actualization and E-Learning: A Qualitative Investigation of University Faculty's Perceived Needs for Effective Online Instruction. *International Journal on E-Learning: Corporate Government, Healthcare, & Higher Education*, *8*(2), 223-240.

Pahl, N. (2008). The Role of Emotional Intelligence in Leadership. In *Druck and Bindung, Books on Demand.* Norderstedt, Germany: Books on Demand.

Pankowski, P. (2004). Faculty Training for Online Teaching. *T.H.E. Journal*. Retrieved from http://thejournal.com/articles/2004/09/01/

faculty-training-for-online-teaching.aspx

Parker, A. (2003). Identifying Predictors of Academic Persistence in Distance Education. *USDLA Journal*, *17*(1).

Paulhus, D., & Vazire, S. (2009). Self-Report Methods. In R. Robins, C. Fraley, & R. Krueger (Eds.), *Handbook of Research Methods in Personality Psychology* (p. 224–250). New York, NY: The Guildford Press.

Pedersen, S., & Macafee, C. (2007). Gender Differences in British Blogging. *Journal of Computer-Mediated Communication*, *12*(4), 1472–1492. Retrieved from http://jcmc.indiana.edu/vol12/issue4/pedersen.html

Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, Design, and Analysis: An Integrated Approach.* Hillsdale, NJ: Erlbaum.

Pekrun, R. (2006). The Control-Value Theory of Achievement Emotions: Assumptions, Corollaries, and Implications for Educational Research and Practice. *Educational Psychology Review*, *18*, 315-341.

Perez, J. C., Petrides, K. V., & Furnham, A. (2005). Measuring Trait Emotional Intelligence. In R. Schulze & R. D. Roberts (Eds.), *International Handbook of Emotional Intelligence.* Cambridge, MA: Hogrefe & Huber.

Perez, L. M. (2011). Teaching Emotional Self-Awareness Through Inquiry-Based Education. *Research to Practice*, *13*(2).

Perez Cereijo, M. (2006). Attitude as Predictor of Success in Online Training. *International Journal on E-Learning*, *5*(4), 623-639.

Petrides, K. V. (2001). *A Psychometric Investigation into the Construct of Emotional Intelligence*. London: University College London.

Petrides, K. V. (2009a). Psychometric Properties of the Trait Emotional Intelligence Questionnaire (TEIQue).

Petrides, K. V. (2009b). *Technical Manual for the Trait Emotional Intelligence Questionnaires (TEIQue)*. London, England: London Psychometric Laboratory.

Petrides, K. V. (2010). Trait Emotional Intelligence Theory. *Psychological Inquiry*, *3*, 136– 139.

Petrides, K. V., Frederickson, N., & Furnham, A. (2004). The role of trait emotional intelligence in academic performance and deviant behaviour at school. *Personality and Individual Differences*, *36*, 277-293.

Petrides, K. V., & Furnham, A. (2000). On the Dimensional Structure of Emotional Intelligence. *Personality and Individual Differences*, *29*(2), 313–320. doi: 10.1016/S0191-8869(99)00195-6

Petrides, K. V., & Furnham, A. (2001). Trait Emotional Intelligence: Psychometric Investigation with Reference to Established Trait Taxonomies. *European Journal of Personality*, *15*(6), 425–448. doi: 10.1002/per.416

Petrides, K. V., & Furnham, A. (2003). Trait Emotional Intelligence: Behavioral Validation in Two Studies of Emotion Recognition and Reactivity to Mood Induction. *European Journal of Personality*, *17*(39-57).

Petrides, K. V., & Furnham, A. (2004). *Technical Manual of the Trait Emotional Intelligence Questionnaire (TEIQue).* London: University of London, Institute of Education.

Petrides, K. V., & Furnham, A. (2006). The Role of Trait Emotional Intelligence in a Gender- Specific Model of Organizational Variables. *Journal of Applied Social Psychology*, *36*(2), 552–569.

Petrides, K. V., Furnham, A., & Frederickson, N. (2004). Emotional Intelligence. *The Psychologist*, *17*(10), 574–577.

Petrides, K. V., Furnham, A., & Mavroveli, S. (2007). Trait Emotional Intelligence. *Moving forward in the Field of EI. In G. Matthews, M.Zeidner, & R. Roberts, R. (Eds.). Emotional Intelligence: Knowns and unknowns (Series in Affective Science). Oxford: Oxford University Press*, *151*, 151–166.

Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The Location of Trait Emotional Intelligence in Personality Factor Space. *British Journal of Psychology*, *98*, 273–289. doi: 10.1348/000712606X120618

Pfeiffer, S. I. (2001). Emotional Intelligence: Popular but Elusive Construct. *Roeper Review*, *23*, 138-142.

Phillips, M. (2005). An Analysis of Emotional Intelligence and Faculty Qualities Necessary for Success in a Nontraditional Classroom Setting. *Dissertation Abstracts International*, *6*(7), 2465A.

Pink, D. (2006). *A Whole New Mind.* New York: Penguin Books.

Powell, W., & Kusuma-Powell, O. (2010). *Becoming an Emotionally*

Intelligent Teacher. Thousand Oaks, CA: Corwin.

Prasad, B., & Lewis, L. (2008). *Distance Education at Degree-Granting Postsecondary Institutions: 2006–2007*. Washington, DC: U.S. Government Printing Office.

Prensky, M. (2001). The games generations: How learners have changed. *Digital game-based learning*, 1-26.

Price, L. (2006). Gender Differences and Similarities in Online Courses: Challenging Stereotypical Views of Women. *Journal of Computer Assisted Learning*, *22*(5), 349–359.

Quarles, P. D., & Cole, H. (2011). Teacher, Know Thyself. *International Journal Of Business, Humanities & Technology*, *1*(3), 113-117.

Rickert, A., & Sacharow, A. (2000). *It's a Woman's World Wide Web*. Reston, VA: Media Matrix and Jupiter Communications.

Rifkin, T. (1998). *Differences between the professional attitudes of full and part-time faculty*. Los Angeles, CA: ERIC Clearinghouse for Community Colleges.

Rosete, D., & Ciarrochi, J. (2005). EI and its relationship to workplace performance outcomes of leadership effectiveness. *Leadership Organizational Development*, *26*(388-399).

Rovai, A. P., & Baker, J. D. (2005). Gender Differences in Online Learning: Sense of Community, Perceived Learning, and Interpersonal Interactions. *Quarterly Review of Distance Education*, *6*(1), 31-44.

Rozell, E. J., Pettijohn, C. E., & Parker, R. (2002). An Empirical

Evaluation of Emotional Intelligence: The Impact on Management Development. *Journal of Management Development*, *21*(3-4), 272-289.

Rudestam, K. E., & Schoenholtz, R. (2009). *Handbook of Online Learning: Innovations in Higher Education and Corporate Training* (2nd ed.). Newbury Park, CA: Sage.

Sala, F. (2002). *Emotional Competence Inventory: Technical Manual*. Philadelphia, PA: McClelland Center For Research, Hay Group.

Salovey, P., & Grewal, D. (2005). The Science of Emotional Intelligence. *Current Directions in Psychological Science*, *14*, 281-285.

Salovey, P., & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition and Personality*, *9*(3), 185-211.

Salovey, P., Mayer, J. D., Caruso, D. R., & Lopes, P. N. (2001). Measuring Emotional Intelligence as a set of Mental Abilities with the MSCEIT. In S. J. Lopez & C. R. Snyder (Eds.), *Handbook of Positive Psychology Assessment.* Washington, DC: American Psychological Association.

Salovey, P., Mayer, J. D., Goldman, S. L., Turvey, C., & Palfai, T. (1995). Emotional Attention, Clarity, and Repair: Exploring Emotional Intelligence using the Trait Meta-Mood Scale. In J. W. Pennebaker (Ed.), *Emotion, Disclosure, and Health.* Washington, DC: American Psychological Association.

Sanchez-Ruiz, M. J., Hernandez-Torrano, J. C., Batey, P.-G. M., & Petrides, K. V. (2011). The Relationship Between Trait Emotional

Intelligence and Creativity Across Subject Domains. *Motivation and Emotion. Official Journal of the Society for the Study of Motivation*, *35*(4).

Sander, S. K. (2011). *Emotional Intelligence, Job Satisfaction, and Students' Perceptions of the Quality of Online Adjunct Faculty.* Ann Arbor, MI: ProQuest, LLC. (UMI: 3443833)

Savicki, V., Foster, D. A., & Kelley, M. (2006). In M. Barrett & M. J. Davidson (Eds.), *Gender and Communication at Work* (p. 270-282). Aldershot, UK: Ashgate Publishing Ltd.

Schutte, N. S., Malouff, J. M., Bobik, C., Conston, T., Greeson, C., Jedlicka, C., ... Wendorf, G. (2001). Emotional Intelligence and Interpersonal Relations. *Journal of Social Psychology*, *141*(4), 523-536.

Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., & Golden, C. J. (1998). Development and Validation of a Measure of Emotional Intelligence. *Personality and Individual Differences*, *25*, 167-177.

Schutte, N. S., Malouff, J. M., Thorsteinsson, E. B., Bhullar, N., & Rooke, S. E. (2007). A Meta-Analytic Investigation of the Relationship between Emotional Intelligence and Health. *Personality and Individual Differences*, *42*(6).

Schwartz, K. (2014). *What Keeps Students Motivated to Learn?* Retrieved from http://blogs.kqed.org/mindshift/2014/03/

what-keeps-students-them-motivated-to-learn/

Seyal, A. H., & Afaal, T. (2013). An investigation of relationship among emotional intelligence, organizational commitment and job satisfaction: Evidence from academics in Brunei Darussalam. *International Business Research*, *6*(3).

Shank, P. (2009). You had me at hello: Pumping up your online courses with simple audio clips. *Online Classroom*, 4-7.

Shapiro, D. L. (2006). Teaching Students How to Use Emotions as They Negotiate. *Negotiation Journal*, *22*(1), 105-109.

Sherron, T. S. (1998). In Support of Distance Learning. *Syllabus*, *11*(7), 44-47.

Simon, M. K. (2006). *Dissertation & Scholarly Research: A Practical Guide to Start & Complete your Dissertation, Thesis, or Formal Research Project*. Dubuque, IA: Kendall/Hunt.

Slaughter, S., & Rhoades, G. (2004). *Academic Capitalism and the New Economy: Markets, State and Higher Education*. Baltimore, MD: Johns Hopkins University Press.

Snider, M., & Borel, K. (2004). *Stalked by a Cyber Bully* (No. 24). Retrieved from http://www.macleans.ca/topstories/technology/article.jsp?content=20040524_81183_81183

Snyder, M. (2009). Instructional-Design Theory to Guide the Creation of Online Learning Communities for Adults. *TechTrends: Linking Research & Practice to Improve Learning*, *53*(1), 45-57. doi:

10.1007/s11528-009-0237-2.

Spearman, C. (1927). *The Abilities of Man.* New York: MacMillan.

Spears, R., & Lea, M. (1994). Love at first Byte? Building Personal Relationships over Computer Networks. In J. T. Wood & S. Duck (Eds.), *Understudied relationships: Off the beaten track* (p. 197-233). Beverly Hills: Sage.

Spector, P. E. (1985). Measurement of Human Service Staff Satisfaction: Development of the Job Satisfaction Survey. *American Journal of Community Psychology*, *13*, 693-713.

Spector, P. E. (1997). *Job Satisfaction: Application, Assessment, Causes, and Consequences.* Thousand Oaks, CA: Sage.

Spector, P. E. (2011). Job Satisfaction Survey Website Statistics. Retrieved from shell.cas.usf.edu/~pspector/scales/jsspag.html

Steiner, C. (2003). *Emotional Literacy: Intelligence with a Heart* (2nd ed.). Personhood Press: Fawnskin, CA.

Sternberg, R. (1988). *The Triarchic Mind: A New Theory of Human Intelligence.* New York: Penguin Books.

Sternberg, R. (1997). The Concept of Intelligence and its Role in Lifelong Learning and Success. *American Psychologist*, *52*, 1030-1045.

Sternberg, R. J. (2000). Wisdom as a Form of Giftedness. *Gifted child quarterly*, *44*(4), 252-259.

Stodel, E., Thompson, T., & MacDonald, C. (2006). Learners' perspectives on what is missing from online learning: interpretations through the

Community of Inquiry framework. *International Review of Research in Open & Distance Learning*, *7*(3), 1-24.

Sullivan, P. (2001). Gender Differences and the Online Classroom: Male and Female College Students Evaluate their Experiences. *Community College Journal of Research and Practice*, *25*(10), 805-818.

Sullivan, P. (2002). It's easier to be yourself when you are invisible: Female college students discuss their online classroom experiences. *Innovative Higher Education*, *27*(129-144).

Sussman, N. M., & Tyson, D. H. (2000). Sex and Power: Gender Differences in Computer-Mediated Interactions. *Computers in Human Behavior*, *16*, 381-394.

Szapkiw, A. (n.d.). *Statistics Guide.* Retrieved from http://bb7.liberty.edu/bbcswebdav/pid-10041362-dt-content-rid-11986478_1/courses/EDUC989_B37_201120/EDUC989_B37_201120_ImportedContent_201012230Materials/Statistics/StatisticsGuide/StatisticsGuide.pdf

Tannen, D. (1994). *Gender and Discourse.* New York: Oxford University Press.

Tapia, M. (2001). Measuring Emotional Intelligence. *Psychological Reports*, *140*(2), 227. doi: 10.2466/PR0.88.2.353-364

Taplin, M., & Jegede, O. (2001). Gender Differences in Factors Influencing Achievement of Distance Education Students. *Open Learning*, *16*(2), 133-154.

Terman, L. M. (1921). Intelligence and its Measurement: A Symposium. *Journal of Educational Psychology*, *12*, 127-133.

Thompson, D. (2006). Informal Faculty Mentoring as a Component of Learning to Teach Online: An Exploratory Study. *Online Journal of Distance Learning Administration*, *9*(3), 1-10.

Thorndike, E. (1920). Intelligence and its uses. *Harper's Magazine*, *140*, 227–235.

Thurstone, L. L. (1938). *Primary Mental Abilities*. Chicago: University of Chicago Press.

Tillman, W., & Tillman, C. (2008). And you thought it was the apple: A study of job satisfaction among teachers. *Academy of Educational Leadership Journal*, *12*(3), 1-8.

Totterdell, P., & Holman, D. (2003). Emotion Regulation in Customer Service Roles: Testing a Model of Emotional Labor. *Journal of Occupational Health Psychology*, *8*, 55–73.

Van Rooy, D. L., & Viswesvaran, C. (2004). Emotional Intelligence: A meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior*, *65*(71-95).

Van Rooy, D. L., Viswesvaran, C., & Pluta, P. (2005). A meta-analytic evaluation of construct validity: What is this thing called emotional intelligence? *Human Performance*, *18*, 445-462.

Van Saane, N., Sluiter, J. K., Verbeek, J. H., & Frings-Dresen, M. H. (2003). Reliability and Validity of Instruments Measuring Job

Satisfaction - A Systematic Review. *Occup Med (Lond)*, *53*(3), 191-200.

Vermillion, J. (2006). A Pilot Study Promoting Technological Opportunity, Interest and Access for Adolescent Girls Using Video Game Design Software. In C. Crawford (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2006* (p. 817-822). Chesapeake, VA: AACE. Retrieved from http://www.editlib.org/p/22148

Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. In M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.), . Cambridge, MA: Harvard University Press.

Wanous, J. P., & Lawler, E. E. (1972). Measurement and Meaning of Job Satisfaction. *Journal of Applied Psychology*, *56*(2), 95-104.

[Web Page]. (n.d.-a). Retrieved from https://www.udemy.com/

[Web Page]. (n.d.-b). Retrieved from https://esurvey.unm.edu/opinio/

[Web Page]. (n.d.-c). Retrieved from http://www.thecrimson.com/article/2014/3/14/columbia-joins-edx/

Wechsler, D. (1940). Non-Intellective Factors in General Intelligence. *Psychological Bulletin*, *37*(444-445).

Wechsler, D. (1997). *WAIS-III: Wechsler Adult Intelligence Scale* (3rd ed.). San Antonio, TX: The Psychological Corporation.

Weisinger, H. (1998). *Emotional Intelligence at Work – The Untapped Edge for Success*. San Francisco, CA: Jossey-Bass.

White, L. A., Nord, R. D., Mael, F. A., & Young, M. C. (1993). The Assessment of Background and Life Experiences (ABLE). In T. H. Trent & J. H. Laurence (Eds.), *Adaptability Screening for the Armed Forces* (p. 101-161). Washington, DC: Office of the Assistant Secretary of Defense.

Wilson, M. (2004). New Directions for Student Services: Serving the Millennial Generation. *New Directions for Student Services: Serving the Millennial Generation, Summer*, *106*, 59-71.

Wing, J. F., Schutte, N. S., & Byrne, B. (2006). The Effects of Positive Writing on Emotional Intelligence and Life Satisfaction. *Journal of Clinical Psychology*, *62*(10), 1291-1302.

Wolcott, L. L. (2003). Dynamics of faculty participation in distance education: motivations, incentives, and rewards. In M. Moore & W. Anderson (Eds.), *Handbook of Distance Education* (p. 549-565). Mahwah, NJ: Lawrence Erlbaum Associates.

Wolf, P. D. (2006). Best practices in the training of faculty to teach online. *Journal of Computing in Higher Education*, *17*(2), 47-78.

Wong, C., & Law, K. S. (2002). The Effects of Leader and Follower Emotional Intelligence on Performance and Attitude: An Exploratory Study. *The Leadership Quarterly*, *13*, 243– 274.

Wood, W., & Stagner, B. (1994). Why are some people easier to influence than others? In S. Shavitt & T. C. Brock (Eds.), *Persuasion* (p. 149-174). Boston, MA: Allyn & Bacon.

Wosnitza, M., & Volet, S. (2005). Origin, direction and impact of emotions in social online learning. *Learning and Instruction*, *15*(5), 446-463.

Yang, Y., & Cornelius, L. F. (2004). *Students' Perceptions Towards the Quality of Online Education: A Qualitative Approach.* Chicago, IL.

Yelboga, A. (2009). Validity and Reliability of the Turkish Version of the Job Satisfaction Survey (JSS). *World Applied Sciences Journal*, *6*(8), 1066-1072.

Young, A. W., Hellawell, D. J., Van de Wal, C., & Johnson, M. (1996). *Neuropsychologia*, *34*(31-39).

Young, S., Dewstow, R., & McSporran, M. (1999). Who Wants to Learn Online? In *4th annual Conference on Innovation and Technology in Computer Science Education.*

Zalinsky, J. S., & Abrahams, N. M. (1979). The effects of item context in faking personnel selection inventories. *Personnel Psychology*, *32*, 161-166.

Zeidner, M., Matthews, G., & Roberts, R. D. (2009). *What we Know About Emotional Intelligence: How it Affects Learning, Work, Relationships, and our Mental Health.* Cambridge, MA: MIT Press.

Zembylas, M. (2008). Adult Learners Emotions in Online Learning. *Journal of Distance Education*, *29*(1), 71-87.

Zimmerman, B. J. (1990). Self-Regulated Learning and Academic Achievement: An Overview. *Educational Psychologist*, *25*(1), 3-17.