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Sales Performance and Emotional Intelligence of Technology Sales Professionals

Michael Reid
Walden University

Walden University

College of Management and Technology

This is to certify that the doctoral study by

Michael Reid

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
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Review Committee
Dr. Lynn Szostek, Committee Chairperson, Doctor of Business Administration Faculty

Dr. Matthew Gonzalez, Committee Member, Doctor of Business Administration Faculty

Dr. Judith Blando, University Reviewer, Doctor of Business Administration Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2015

Abstract

Sales Performance and Emotional Intelligence of Technology Sales Professionals

by

Michael Reid

MS, Boston University, 1992

BS, West Virginia University, 1987

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

United States business leaders spend $15 billion per year on sales training, but approximately 50% of salespeople still fail to reach their annual sales targets. Business leaders have limited understanding of the relationship between emotional intelligence and its central constructs (self-perception, self-expression, interpersonal, decision making, and stress management) and sales performance of sales professionals based in the United States. The purpose of this correlational research study was to examine the relationship between emotional intelligence and sales performance via an online pre-existing emotional intelligence assessment. The theoretical framework incorporated emotional intelligence theory and job performance theory. The sample included 86 technology sales professionals working in the United States who were recruited through a nonrandom purposive sampling method. The correlation results showed an association exists between decision making and sales performance ($r = .310$, $n = 73$; $p < .01$). For all 6 predictor variables, the regression model was not a significant predictor of sales performance, $F(6,66) = 1.295$, $p = .272$, $R^2 = .105$. By including only decision making, the linear regression model was a significant predictor of sales performance, $F(1,71) = 7.550$, $p < .01$, $R^2 = .096$. The results were not generalizable, but suggest that decision making is significant in achieving sales performance. These results suggest that higher decision making skills lead to higher sales performance. Social implications for sales and business leaders include using these results to seek and hire emotionally intelligent sales professionals and training existing sales professionals about emotional intelligence competencies to improve company-wide sales performance.

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Dedication

This study is dedicated to my God and family. Thank you God for giving me the intellectual curiosity and discipline to complete this work. Thank you to my wife, Denise Reid, who never complained about me going to the library on weekends or closing the door to my office on weeknights. Thank you to my children, Jared Reid and Jon Reid, for the patience displayed listening to me endlessly talk about this study at dinner time. You are growing into fine young men and I am proud of you both. Finally, thank you to my parents, Harry and Joanne Reid, who taught me to reach high in life.

Acknowledgments

Thank you to my committee members, Dr. Lynn Szostek (Chair) and Dr. Matthew Gonzales for working with me to ensure that this study met the academic standards of Walden University. Dr. Lynn Szostek has been an inspiration pouring out an endless supply of support and encouragement. I also acknowledge past academics who unknowing influenced my direction. They include my 10th grade English teacher, Mr. Steven Taylor, and West Virginia University Industrial Engineering Professor, Dr. Jack Byrd.

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Section 1: Foundation of the Study

Background of the Problem

The purpose of the research study was to explore the relationship between emotional intelligence and sales performance. The sales team is an essential element in the business-to-business selling process. For most companies, a salesperson initiates, develops, and nurtures customer relationships (Kumar, Sunder, & Leone, 2014). Business leaders worldwide spend billions of United States dollars every year training their sales teams (Little, 2014). Business leaders can overlook the gap between mediocre and high sales performance because productivity exists in both instances (Frino & Desiderio, 2013). This performance gap can make a marked difference to the success of a business and effect the development and income of its salespeople.

Emotional intelligence consists of using emotions to think more intelligently, and has been identified by some researchers as having a positive relationship to workplace success (Ono, Sachau, Deal, Englert, & Taylor, 2011). Understanding the relationship between emotional intelligence and sales performance can lead to gap closure between mediocre and high performance. Emotional intelligence can provide input into a more thoughtful sales process with improved customer relationships at its epicenter (Borg & Johnston, 2012). To gain a competitive advantage, and better organizational outcomes, leaders should consider hiring and training for an emotionally intelligent salesforce.

Problem Statement

United States business leaders spend $15 billion per year on sales training (Lassk, Ingram, Kraus, & DiMasco, 2012), but approximately 50% of these businesses' salespeople fail to reach their annual sales targets (Boichuk et al., 2014). An estimated 90% of top performers in virtually every industry possess high emotional intelligence (Kidwell, Hardesty, Murtha, & Shibin, 2012), suggesting that high emotional intelligence can be used to improve sales performance. The general business problem investigated by this study is that companies are experiencing smaller returns on their training and development investments in sales professionals. The specific business problem is that some business leaders have a limited understanding of the relationship between the sales performance of United States-based sales professionals and emotional intelligence and its central constructs of self-perception, self-expression, interpersonal, decision making, and stress management.

Purpose Statement

The purpose of this quantitative correlational research study was to examine the relationship between emotional intelligence and sales performance of United States-based sales professionals. The independent variables tracked in this study were (a) emotional intelligence, (b) self-perception, (c) self-expression, (d) interpersonal, (e) decision making, and (f) stress management. The dependent variable was sales performance of United States-based technology sales professionals. The targeted population consisted of business-to-business technology sales professionals located throughout the United States.

The intended business results of this study consist of developing emotional intelligence sales training and recruitment programs that lead to higher sales quota attainment. These findings have social implications for sales and business leaders who may use these results to seek and hire emotionally intelligent sales professionals and train existing sales professionals about emotional intelligence competencies to improve company-wide sales performance.

Nature of the Study

A quantitative method was chosen for this study. Quantitative research seeks to examine the significance of relationships or causes through numerical interpretation, not to explore abilities or perceptions (Fisher & Stenner, 2011). The quantitative method was appropriate for this study because the purpose of the study was to analyze numerical data and infer the results to a larger population. The qualitative method is useful for examining the attitudes held by individuals or similarities among participants (Schleifer & Rothman, 2012), but would not have permitted testing whether emotional intelligence varied with sales performance. A mixed-methods approach is beneficial when research is designed to provide a comprehensive understanding of a problem or phenomenon (Brannen & Moss, 2012). The qualitative and mixed-methods approaches were therefore not deemed appropriate for this study. The decision to use a quantitative method came from the need to evaluate the relationship between my independent and dependent variables.

A nonexperimental correlation design was chosen for this study. Correlation research examines the presence and strength of relationships among covariates (Delost & Nadder, 2014; Pilcher & Bedford, 2011). The correlation design was appropriate for this study because the aim of this study was to understand the relationship between a set of independent variables (emotional intelligence, self-perception, self-expression, interpersonal, decision making, and stress management) and a dependent variable (sales performance). Experimental design is the strongest of all research designs as it requires manipulation, control, and random assignment (Delost & Nadder, 2014). Limited resources prevented me from conducting an experimental design. Descriptive designs study the existing state of a situation or circumstance (Bernard, 2013), which was not a study goal. This research was aimed at understanding relationships among variables, so experimental and descriptive designs were not appropriate.

Research Question

The overarching research question for this study was: What is the relationship among emotional intelligence, self-perception, self-expression, interpersonal, decision making, stress management, and sales performance?

Hypotheses

The six hypotheses proposed for this study included:

$H1_0$: There is no statistically significant relationship between a United States-based technology sales professional's emotional intelligence score and sales performance.

$H1_a$: There is a statistically significant relationship between a United States-based technology sales professional's emotional intelligence score and sales performance.

$H2_0$: There is no statistically significant relationship between a United States-based technology sales professional's self-perception composite score and sales performance.

$H2_a$: There is a statistically significant relationship between a United States-based technology sales professional's self-perception composite score and sales performance.

$H3_0$: There is no statistically significant relationship between a United States-based technology sales professional's self-expression composite score and sales performance.

$H3_a$: There is a statistically significant relationship between a United States-based technology sales professional's self-expression composite score and sales performance.

$H4_0$: There is no statistically significant relationship between a United States-based technology sales professional's interpersonal composite score and sales performance.

$H4_a$: There is a statistically significant relationship between a United States-based technology sales professional's interpersonal composite score and sales performance.

$H5_0$: There is no statistically significant relationship between a United States-based technology sales professional's decision making composite score and sales performance.

$H5_a$: There is a statistically significant relationship between a United States-based technology sales professional's decision making composite score and sales performance.

$H6_0$: There is no statistically significant relationship between a United States-based technology sales professional's stress management composite score and sales performance.

$H6_a$: There is a statistically significant relationship between a United States-based technology sales professional's stress management composite score and sales performance.

Theoretical Framework

The purpose of this quantitative correlational research study was to examine the relationship between emotional intelligence and sales performance of United States-based sales professionals. Theories that framed this study were emotional intelligence and job performance.

Emotional Intelligence Theory

During the 1970s and 1980s, psychologists Howard Gardner, Peter Salovey, and John Mayer developed emotional intelligence theory. Three emotional intelligence models exist (Samad, 2014). The ability-based model focuses on the individual's ability

to process and use emotional information (Greenidge, Devonish, & Alleyne, 2014). The trait-based model is measured by self-report and includes behavioral dispositions and self-perceived abilities (Di Fabio & Saklofske, 2014). The mixed model combines ability- and trait-based models. Emotional intelligence is an umbrella term that includes a collection of personality traits, affect, and self-perceived abilities, rather than actual aptitude (Joseph, Jin, Newman, & O'Boyle, 2015). As applied to this study, emotional intelligence theory suggested that the independent variables of emotional intelligence branches would influence sales performance outcomes because sales professionals rely on emotional intelligence qualities. Figure 1 shows the emotional intelligence theory as it applies to examining sales performance.

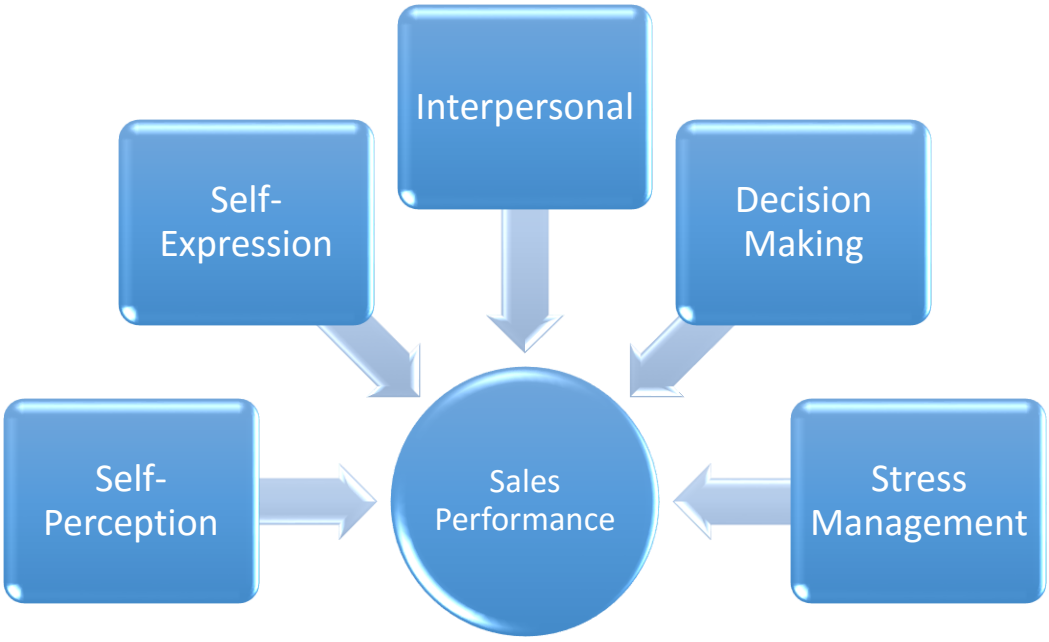

Figure 1. A graphical depiction of the emotional intelligence theoretical framework using sales performance.

Job Performance Theory

Campbell, McCloy, Oppler, and Sager (1993) created job performance theory. Campbell et al. (1993) defined it as what people do that can be observed and measured regarding proficiency or level of contribution. It also includes actions or behaviors relevant to an organization's goals (Blickle et al., 2011). Campbell et al. (1993) job performance model is said to be the most prominent job performance model in the literature (Borman, Brantley, & Hanson, 2014; Lee & Donohue, 2012). As applied to this study, job performance theory suggested that the dependent variable of sales performance would be unique to the population under study and not necessarily generalizable to other populations.

Operational Definitions

Emotional intelligence: A person's ability to determine their emotions and control them, detect the emotional state of others, and leverage those emotions to influence them (Farh, Seo, & Tesluk, 2012).

Emotional Quotient Inventory 2.0® (EQ-i 2.0®): A valid and reliable self-assessment instrument to measure the total emotional quotient (EQ) of an individual (Multi-Health Systems, Inc., 2011). This assessment includes 133 items with a five-point Likert scale response format. Its results include individual and workplace reports, in addition to scores for emotional intelligence, its five composite scales, and 15 subscales.

Salesperson performance: The financial result of a salesperson's sales

activities (Valenzuela, Torres, Hidalgo, & Farías, 2014).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are unverified facts that a researcher assumes are truthful (Martin & Parmar, 2012). My initial assumption was that study participants would be candid answering assessment questions and truthful providing demographic and sales performance information (Leising, Locke, Kurzius, & Zimmermann, 2015). Differences associated with mood, fatigue, and attention span did not taint results since these individual differences were evenly distributed among respondents. The next assumption was that study participants were representative of the population under investigation and were normally distributed. Two United States-based technology sales population groups were sampled. My company's sales team, and my LinkedIn sales contacts participated. An assumption was that study participants who achieved their most recent annual sales performance target may not have a high level of emotional intelligence. My final assumption was that conducting correlation and regression data analyses were appropriate tests to address this quantitative study's purpose statement.

Limitations

Every study has weaknesses (Bernard, 2013). My initial limitation was that each research participant provided sales performance attainment specific to their employers' sales expectations. Sales leaders employ a sales performance method that best meet a company's unique business needs, making generalizations to other businesses difficult.

The next limitation was that research participants reported prior year sales attainment, as opposed to, multi-year sales performance. Limited resources prevented gathering a multi-year performance study. My company sales participants were encouraged, through company leadership email, to participate in the optional emotional intelligence assessment. Study participants may have felt compelled to score well and manipulate the emotional intelligence assessment. Finally, the EQ-i 2.0® (Multi-Health Systems, Inc., 2011) instrument is highly regarded as an emotional intelligence assessment tool. Other instruments may exist that might be more advantageous for measuring emotional intelligence such as the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT).

Delimitations

Bernard (2013) defined delimitations as the boundaries of a study. The scope of this quantitative study was to examine the relationship between emotional intelligence and sales performance of United States-based sales professionals. A boundary of this study included that technology sales professionals were invited to participate through a nonprobability purposeful sample from my company and my LinkedIn connections. As a result, findings might only be applicable to those population samples, as opposed to other sales organizations and industries.

Significance of the Study

Contribution to Business Practice

The purpose of this quantitative correlational research study was to examine the relationship between emotional intelligence and sales performance of United States-based

sales professionals. Previous research studies were completed regarding emotional intelligence and workplace performance (Cheng, Huang, Lee, & Ren, 2012; Gao, Shi, Niu, & Wang, 2013; Mortan, Ripoll, Carvalho, & Bernal, 2014; Zampetakis & Moustakis, 2011). No specific study examining whether a relationship exists between emotional intelligence and sales performance of United States-based technology sales professionals has been done.

By finding a meaningful correlation between levels of emotional intelligence and sales performance in this study, support to develop and implement emotional intelligence sales training and recruitment tools for businesses is enhanced (Haakonstad, 2011). Business leaders are able to refine existing sales training and recruitment programs to enhance sales performance. By understanding the strength of correlation between levels of emotional intelligence and sales performance in this study, business leaders can investigate other influential factors that affect sales performance more significantly than emotional intelligence.

Implications for Social Change

This study was designed to promote positive social change by identifying information for use in developing and implementing sales training and recruitment programs that promote the wellness of sales professionals. By implementing effective programs, sales professionals hired and trained have the desired skill sets to achieve sales performance. Sales professionals learn to control their emotions more effectively when dealing with customers and their companies. These outcomes lead to enhanced

organization effectiveness, lower salesperson turnover, and higher sales performance (Bande, Fernández-Ferrín, Varela, & Jaramillo, 2015). Employee performance evaluations may not be consistent with an employee's contribution to the company. Emotional intelligence indicators should be an integral component of a more holistic employee performance evaluation process (Pearman, 2011).

A Review of the Professional and Academic Literature

The purpose of this literature review was to explore previous emotional intelligence and sales performance research and documentation. The literature review explained how past researchers examined emotional intelligence and sales performance, identified gaps in emotional intelligence and sales performance, and declared the need for further investigative research. A variety of literature review methods and presentation findings were found with an Internet search engine (Abrams, 2012). Search results aided in organizing the information into logical segments.

The organization of this literature review begins with emotional intelligence theory and background followed by an examination of emotional intelligence assessment instruments. It includes an examination of emotional intelligence training and a discussion of previous studies. It also includes a review of literature on sales performance theory and its history, followed by a discussion of previously conducted emotional intelligence and sales performance studies organized by industry segment.

The approach strategy for this literature review was to research English-language peer-reviewed works from online databases, published works, and organization websites.

Online research included scholarly journal and academic articles, reports, and influential books. On-line databases included Thoreau, Academic Search Complete, ProQuest Central, Business Source Complete, ABI/INFORM, Emerald Management Journals, SAGE Premier, PsyncARTICLES, PsyncINFO, and Google Scholar.

The research for this study started with the primary keywords *sales performance* and *emotional intelligence*. Further searches explored the following keywords: (a) technology sales professional performance, (b) annual sales performance, (c) sales outcomes, (d) sales training, (e) emotional intellect, (f) emotional aptitude and (g) EI. The resulting research criteria produced more than 1,390 peer-reviewed articles and books. By using both emotional intelligence and sales performance keywords, I was able to further narrow results. Although older references provided the theoretical framework for the study, more than 85% of the used references were peer-reviewed and published within five years of my anticipated graduation date.

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The overarching research question for this study was: What is the relationship among emotional intelligence, self-perception, self-expression, interpersonal, decision making, stress management, and sales performance?

The six hypotheses for this study were:

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- $H6_a$: There is a statistical relationship between a United States-based technology sales professional's stress management composite score and sales performance.

Emotional Intelligence Theory

The concept of social intelligence first appeared in the work of Edward Thorndike in the 1920s, and was defined as a type of intelligence a person could possess (Birknerova, 2011). Emotional intelligence is considered an aspect of social intelligence given social intelligence's focus on relationships. Although ignored in 1940, David Wechsler suggested including social intelligence as part of intelligence quotient (IQ) testing (Faguy, 2012). In 1983, Howard Gardner proposed the theory of personal intelligence. This theory included seven distinct types of intelligence, including intra-and interpersonal intelligences (Ahuja, 2011; Brackett, Rivers, & Salovey, 2011; Ghraibeh, 2012). Intra-and interpersonal intelligences closely represent researchers' current understanding of emotional intelligence.

Emotional intelligence is the ability to appraise and express emotions, both one's own and those of others, and reflects an individual's skill at interpreting a variety of

verbal and nonverbal information. In 1990, Peter Salovey and John Mayer wrote what is now considered to be the seminal work on emotional intelligence, an article entitled *Emotional intelligence* (1990). Salovey and Mayer (1990) laid the groundwork for all subsequent research and thinking about emotional intelligence (Faguy, 2012). These researchers identified the relationship between emotions and workplace success and developed Emotional Intelligence Theory, which states that emotions cue cognitive capabilities and their range of management, or cognitive aptitude (Abe, 2011). Salovey and Mayer (1997) further refined this definition of emotional intelligence as "the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth" (Salovey & Mayer, 1997, p. 35, as quoted in Faguy, 2012, p. 238). Regulating or managing emotion can be routine, but an emotionally intelligent person does it well.

In 1997, Mayer and Salovey revised their original conception to reflect four branches of emotional intelligence. Perception, appraisal, and expression are part of the basic emotional intelligence branches (Mayer, Salovey, & Caruso, 2004). This branch reflects a fundamental ability to identify an emotion, including true versus false emotion, as well as the ability to express emotions (Mayer et al., 2004). Emotional facilitation of thinking has to do with the ability to use emotions in one's thought, such as recalling an emotion (Mayer et al., 2004). Understanding and analyzing emotions reflects a more

sophisticated knowledge of emotions and how they operate, such as complex combinations of emotions and emotional transitions (Mayer et al., 2004). Regulating emotions relates to the ability to "detach" from emotions not immediately useful (Mayer et al., 2004).

In 1995, while researching emotional literacy, Daniel Goleman read Salovey and Mayer's article and published a book titled *Emotional Intelligence: Why It Can Matter More Than IQ*. It became a bestseller and helped to popularize emotional intelligence. Goleman (1998) defined emotional intelligence as "the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships" (p 317). Goleman identified five competencies of emotional intelligence including self-awareness, self-regulation, motivation, empathy, and social skills (Goleman, 1998). Goleman explained how these five components or talents mattered in work life. This framework has a basis for one's ability to recognize a feeling when it happens and possess the awareness to understand, control and apply this emotion (Hess & Bacigalupo, 2011). As applied to this study, Goleman's (1998) concept of emotional intelligence theory was adopted.

Criticism regarding emotional intelligence theory encompasses two points of view. The first is that emotional intelligence is not a new form of intelligence but rather overlaps with existing constructs. Emotional intelligence was defined as a group of qualities rather than a more precise scientific definition (Matthews, Zeidner, & Roberts, 2011). Although emotional intelligence instruments displayed good divergence from

others, emotional intelligence questions showed high correlations with personality traits (Matthews et al., 2011). The second criticism is that emotional intelligence is perceived as having a desirable moral quality rather than a skill or outcome. Emotional intelligence has been linked to positive outcomes in mental and physical health (O'Connor & Athota, 2013). Individuals who possess high self-perceived ability might be altruistic, but could also be tempted to use that skill over others for self-gain (O'Connor & Athota, 2013).

Emotional Intelligence Instruments

As emotional intelligence gained attention from leading publications, advocates promoted its use while skeptics questioned its legitimacy (O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011). As the debate continued on how important emotional intelligence was to the workplace in the 1990s, practitioners conducted research into methods of measuring it (Green & Salkind, 2011). Although some researchers questioned the connection between emotionally intelligent leaders, and organizational success (Lindebaum & Cartwright, 2011; Walter, Cole, & Humphrey, 2011), most of emotional intelligence criticism surrounded the use of instruments to measure and predict emotional intelligence.

Despite claims of the importance of emotional intelligence, empirical support for its incremental direct effects on outcomes relevant to professional selling has been disappointing (McFarland, Rode, & Shervani, 2015). Numerous emotional intelligence instruments have been published with some producing inconsistent findings (Prentice & King, 2012). Criticism surrounds some assessment tools that require self-reporting while

other tools depend on evaluations by others. Participants may either intentionally misrepresent themselves on self-assessments or may not be emotionally aware enough to report on themselves accurately. Likewise, some participants may be too critical or flattering of themselves in their self-ratings. Evaluations by others may also not be accurate. Work colleagues could assess an inaccurately positive picture of each other while other people might use the tool to retaliate against coworkers. Employees might also be hesitant to be too critical of their supervisors or others in positions of power. Finally, reports and assessments from multiple sources might be more accurate than a single source, or might confuse the true assessment further (Faguy, 2012).

Three emotional intelligence models exist (Samad, 2014). The ability-based model focuses on the individual's ability to process and use emotional information (Greenidge et al., 2014). The trait-based model is measured by self-report and includes behavioral dispositions and self-perceived abilities (Di Fabio & Saklofske, 2014). The mixed model combines ability- and trait-based models. Emotional intelligence is an umbrella term that includes a collection of personality traits, affect, and self-perceived abilities, rather than actual aptitude (Joseph et al., 2015). As applied to this study, emotional intelligence theory suggested that the independent variables of emotional intelligence constructs would influence sales performance outcomes because sales professionals rely on emotional intelligence qualities. Three of the more commonly referred to emotional intelligence assessments include a trait-based model called Emotional Quotient Inventory (EQ-i); a mixed-based model called Goleman’s Emotional

Competency Index (ECI); and an ability-based model called Mayer-Salovey- Caruso Emotional Intelligence Test (MSCEIT). An ability-based model for sales domain called Emotional Intelligence Marketing Exchange (EIME) was also examined.

Emotional Quotient Inventory (EQ-i)

In 1996, Reuven Bar-On (2006) published the first emotional-social intelligence (ESI) assessment tool and called it the Emotional Quotient-Inventory (EQ-i). Bar-On (2006) defined ESI as "a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others, and relate with them, and cope with daily demands" (p.3). Bar-On coined the term Emotional Quotient (EQ) to refer to assessing emotional competency. EQ-i is reported to be the most widely used emotional intelligence assessment instrument (Multi-Health Systems, Inc., 2011). Given its ease to administer, EQ-i was quickly accepted and implemented by organizations interested in an inexpensive tool measuring potential for performance rather than performance itself (Bar-On, 2006). The self-assessment can be administered online and takes less than 30 minutes to complete.

EQ-i measures emotional intelligence by a person's ability with social behavior traits and competencies (Bar-On, 2006). The self-assessment includes 133 questions and incorporates a 5-point Likert scale response ranging from *not true of me* to *true of me.* EQ-i spans five distinct areas including (a) intrapersonal skills, (b) interpersonal skills, (c) adaptability, (d) stress management, and (e) general mood (Bar-On, 2006).

Intrapersonal refers to the inner self and evaluates self-regard, emotional self-awareness, assertiveness, independence, and self-actualization (Bar-On, 2006, p. 4). *Interpersonal* measures capacity and functioning, such as empathy, social responsibility, and interpersonal relationships (Bar-On, 2006, p. 4). *Stress management* measures tolerance and impulse control (Bar-On, 2006, p. 4). *Adaptability* measures reality testing, flexibility, and problem-solving skills, as well as, how a person copes with environmental demands (Bar-On, 2006, p. 4). *General mood* consists of optimism and happiness and measures one's general feeling of content and outlook on life (Bar-On, 2006, p. 4). Based on 4,000 North American respondents who were majority younger than 30, EQ-i was reported to have equal representation of men and women (Bar-On, 2006). Reliability and validity of the assessment have been tested and reported (Bar-On, 2006).

A revised EQ-i 2.0® was developed and included updated scales based on information gathered from ongoing research (Multi-Health Systems, Inc., 2011). EQ-i 2.0® included changes in: (a) intrapersonal EQ composite was divided into two separate composite scales, self-perception and self-expression; (b) emotional expression was a new subscale added to the self-expression composite scale, and included both verbal and nonverbal expression; (c) problem-solving was redefined to avoid interpretation issues on the EQ-i; (d) decision making composite scale was added and includes problem-solving, reality testing, and impulse control; (e) happiness was a general mood indicator on the EQ-i and contributed to the Total EQ score but was moved to a wellness indicator and does not affect the Total EQ score (Multi-Health Systems, Inc., 2011).

Scoring used in the EQ-i 2.0® includes raw scores that are converted to adjusted scores. Based on normative data from over 4,000 individuals, scores are reflected in a number ranging from 50–150 (Multi-Health Systems, Inc., 2011). A score lower than 70 indicates a *very much below average* EQ score. A score between 71 and 90 suggests a *below average* rating. A score between 91 and 110 reflects an *average* level of EQ. A score between 111 and 130 indicates an *above average* EQ. Any score over 130 suggests an individual has a *very much above average* EQ. The EQ-i 2.0® provides a total emotional intelligence score, based on the self-perception, self- expression, interpersonal, decision making, and stress management composite scale scores (Multi-Health Systems, Inc., 2011). As applied to this study, emotional intelligence theory suggested that the independent variables of emotional intelligence constructs would influence sales performance outcomes because sales professionals rely on emotional intelligence qualities.

Emotional and Social Competence Inventory (ESCI)

Developed in 1991 by Boyatzis and Goleman, the Emotional-Social Competence Inventory (ESCI) was designed to assess emotional competencies and positive social behaviors (Shanmugasundaram & Mohamad, 2011). ESCI is a 360-degree assessment that relies on others' assessments of an individual's emotional intelligence (Faguy, 2012). ESCI used a 7-point Likert rating scale to rate characteristics across 18 competencies of the person being assessed (Shanmugasundaram & Mohamad, 2011).

Revised by Goleman and Boyatzis in 2007, ESCI version 3 uses a 5-point Likert rating scale with 68 questions across four domain clusters including (a) self-awareness, (b) self-management, (c) social awareness, and (d) relationship management (Shanmugasundaram & Mohamad, 2011). Self-awareness competency is defined as "emotional self-awareness" (Shanmugasundaram & Mohamad, 2011, p. 1792). Self-management competencies refer to "achievement orientation, adaptability, emotional self-control, and positive outlook" (Shanmugasundaram & Mohamad, 2011, p. 1792). Social-awareness competencies include "empathy and organizational awareness" (Shanmugasundaram & Mohamad, 2011, p. 1792). Relationship management competencies refer to "conflict management, coach and mentor, influence, inspirational leadership, and teamwork" (Shanmugasundaram & Mohamad, 2011, p. 1792). ESCI is often used to assess managerial abilities given its reliance on others' assessments of an individual's emotional intelligence.

Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)

The Multifactor Emotional Intelligence Scale (MEIS), the predecessor to the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), was first developed in the mid-1990s by the team of Mayer, Salovey, and Caruso. MEIS analyzed a participant's emotional intelligence by assessing their ability to identify, understand, and manage their emotions and identify emotions of others. Responses to the MEIS assessment were measured by experts. In 2002, the MEIS was refined and grew into the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT).

MSCEIT is a performance based measurement regarding how people perform tasks and solve emotional problems (Mayer, Salovey, & Caruso, 2002). MSCEIT was developed using a sample population of 5,000 participants worldwide, including mostly white women younger than 30 (Mayer et al., 2002). Test format comprises 141 questions that can be administered to individuals or in a group setting, through paper or on-line (Mayer, Salovey, & Caruso, 2012). Assessment takes less than 45 minutes to complete. Responses on the MSCEIT are unaffected by self-concept or other biases. MSCEIT assessment yields an emotional intelligence score, two area scores, and four branch scores grounded within individual branches (Mayer et al., 2012). Each branch comprises specific tasks that the respondent must complete to generate two domain scores (Mayer et al., 2012).

The MSCEIT measures emotional intelligence across four scales including (a) perceiving emotion, (b) facilitating thought, (c) understanding emotion, and (d) managing emotions (Mayer et al, 2002). *Perceiving emotion* concerns "identifying emotions conveyed through expressions and abstract pictures" (Fiori & Antonakis, 2011, p. 6). *Facilitating thought* refers to "how certain moods may facilitate thinking and comparison of emotions to sensations, such as color, light, and temperature" (Fiori & Antonakis, 2011, p. 6). *Understanding emotion* concerns "connecting emotions to certain situations and knowledge of how emotions may change and develop" (Fiori & Antonakis, 2011, p. 6). *Managing emotions* refers to "rating which emotional strategy would be most appropriate to handle a situation and be effective for self-regulation" (Fiori & Antonakis,

2011, p. 6). Previous studies have demonstrated that the MSCEIT provides reliability in assessment scores (Mayer et al., 2012).

Emotional Intelligence Marketing Exchange (EIME)

One's ability to recognize, regulate, and use emotional information can result in highly effective performance (Emmerling & Boyatzis, 2012). Rather than competing with general domain emotional intelligence assessments, Kidwell, Hardesty, Murtha, and Sheng (2011) published a study focused on creating a new emotional intelligence assessment specifically targeted toward salespeople. Emotion Intelligence Marketing Exchange (EIME) assessment focused on ability-based, domain-specific criteria such as sales revenue and customer retention (Kidwell et al., 2011).

Emotion Intelligence Marketing Exchange (EIME) scale was designed to identify unique emotional abilities that make salespeople more effective when selling products and services to their customers. EIME assessment measures four dimensions including (a) perceiving emotion, (b) facilitating (or using) emotion, (c) understanding emotion, and (d) managing emotion (Kidwell et al., 2012). Format comprises 15 questions administered to individuals through paper or on-line (Kidwell et al., 2011)

Emotional Intelligence Training

Emotional intelligence describes characteristics beyond technical skill and traditional cognitive intelligence. It includes factors like awareness of and ability to regulate emotional responses and to understand others. Employees who possess higher emotional intelligence than others seem to manage stress and other workplace issues

better (Jordan & Troth, 2011). Employee attitudes can be changed; all aspects of emotional intelligence can be developed and improved (Jahangard et al., 2012).

Researchers in various industries have investigated whether it is possible to increase emotional intelligence. According to Kidwell et al. (2012), salespeople with moderate to high cognitive intelligence stand a better chance of learning to improve their emotional intelligence skills. Such training could help sales professionals improve their performance. Business leaders could assess overall emotional intelligence competencies to discern which dimensions are lacking and focus training on overcoming emotional intelligence weaknesses (Kidwell et al., 2012). The Consortium for Research on Emotional Intelligence in Organizations (2014) recommend four phases of corporate emotional intelligence training including (a) preparation, (b) training, (c) transfer/maintenance, and (d) evaluation.

Previous studies comparing emotional intelligence trained groups with nontrained groups found that training increased emotional intelligence competency (Abe, 2011; Ono et al., 2011; Schutte, Malouff, & Thorsteinsson, 2013). For example, Gignac, Harmer, Jennings, and Palmer (2012) examined the effectiveness of an emotional intelligence training program on sales performance of pharmaceutical sales representatives from Australia. Using the self-report Genos Emotional Intelligence Inventory assessment, an experimental, repeated measures between-groups design was used (Gignac et al., 2012). Results demonstrated that rater-report emotional intelligence correlated significantly with sales performance (Gignac et al., 2012). Salespeople who received emotional

intelligence training “outperformed a corresponding control group by approximately 9% with respect to sales performance” (Gignac et al., 2012, p. 104). Studies were also reported by Nelis et al. (2011) who observed higher emotional intelligence achievement among participants after brief training on emotional intelligence competencies.

Kirk, Schutte, and Hine (2011) provided emotional intelligence, emotional self-efficacy, and workplace civility training to employees. Participants were segmented into intervention and control groups. Participants in the intervention group showed significant increases in self-efficacy following training. Employees scored higher on emotional intelligence, emotional self-efficacy, and workplace civility than employees in the control group.

Kotsou, Nelis, Gregoire, and Mikolajczak (2011) reported higher than expected increases in self-reported and observer-reported emotional intelligence among 132 participants in their intervention group than among participants in their control group. The intervention group was trained on five core emotional competencies. Emotional intelligence skills increased significantly in the intervention group. Participants also showed higher increases in life satisfaction and lowered self-reported stress levels. Kotsou et al (2011) revealed that emotional intelligence competencies can be improved and have lasting personal benefits.

Not all studies support that emotional intelligence training improves work-related outcomes. For example, Larin, Benson, Wessel, Martin, and Ploeg (2013) compared the development of emotional-social intelligence (ESI) of nursing and physical therapy

students. From the beginning of their education until after their first clinical experience, 73 nursing students and 60 physical therapy students completed self-report questionnaires. Bar-On's Emotional Quotient Inventory Short survey instrument was used. Results revealed that participants had little change.

Kruml and Yockey (2011) also concluded that there were no significant differences in the effectiveness of a seven-or 16-week emotional intelligence curriculum. Participants who initially scored low or had average emotional intelligence scores experienced some improvements. Others who initially scored high did not see an improvement in their emotional intelligence score.

Job Performance Theory

Campbell et al. (1993) created job performance theory. They defined job performance as what people do that can be observed and measured regarding proficiency or level of contribution. It also includes actions or behaviors relevant to an organization's goals (Blickle et al., 2011). As an outcome, salesperson job performance is defined as the financial result of a salesperson's sales activities (Valenzuela et al., 2014). Campbell's job performance model is said to be the most prominent job performance model in the literature (Borman et al., 2014; Lee & Donohue, 2012). The ability to predict sales job performance remains elusive due to many variables including salesperson selection, buyer–seller interactions, job design, incentive systems, sales controls, and supervision (Evans, McFarland, Dietz, & Jaramillo, 2012).

Emotional intelligence competencies include being aware of emotions and using them to guide thinking and behavior (Abe, 2011; Agnihotri, Krush, & Singh, 2012; Coleman, 2014). Emotional intelligence is considered a strong predictor of success in the workplace (Nadler, 2011). Many early studies on sales job performance focused on the strength of relationship between salesperson qualifications (e.g., years of selling experience) and sales attainment (Ross, Desiderio, Knudstrup, & Frino, 2013). From the mid-twentieth century, sales job performance evolved from comparisons to job satisfaction and strategy to more subjective concepts such as communication, context, and emotions. In frameworks and various literature reviews, sales performance has been conceptualized to be the result of a collection of moderating and mediating variables.

Performance measures should include factors influencing work-related outcomes (Bateman & Snell, 2012). Medhurst and Albrecht (2011) indicated that sales performance was an important element regarding individual and organizational performance. They presented an individual-level salesperson job performance model regarding (a) how employee involvement climate influences engagement, (b) how psychological capital influences performance, (c) how employee involvement climate and psychological capital interact to influence employee engagement; and (d) how, in turn, engagement influences salesperson performance (Medhurst & Albrecht, 2011, p. 398). Researchers expect their model to be useful to human resource and sales managers looking to improve skills and more fully involve salespeople to optimize salesperson performance (Medhurst & Albrecht, 2011).

Given the growing global competitive pressure, extensive research has been done to understand the most influential factors of sales job performance (Bodla & Naeem, 2014; Verbeke, Dietz, & Verwaal, 2011). Intrinsic and extrinsic motivation has been thoroughly explored in leading sales and marketing journals (Verbeke et al., 2011). Motivation is a top predictor of sales job performance in meta-analytical reviews (Verbeke, et al., 2011). For example, Bodla and Naeem (2014) developed and tested a "theory-driven framework in linking intrinsic motivation to sales job performance while using sales force creative performance as a partial mediator" (Bodla & Naeem, 2014, p. 468). Results concluded that sales performance was encouraged by intrinsic motivation (Bodla & Naeem, 2014).

Wanting to understand if a salespersons' job performance was related to their ability to be coached, Shannahan, Bush, and Shannahan (2013) indicated that sales performance was "highest when salespeople are highly coachable, highly competitive, and under transformational leadership" (Shannahan et al., 2013, p. 40). Salespersons acceptance of being coached was an important mediator to both transformational leadership and competitiveness impact to sales job performance (Shannahan et al., 2013).

As company leadership spends millions per year to increase salesperson job performance and reduce salesperson turnover (Johnston & Marshall, 2013), a way to accomplish both is through company mentoring programs. Rollins, Rutherford, and Nickell (2014) study focus explored informal mentoring on outcome-based salesperson performance. Mentoring is believed to play a significant role in corporations, yet little

empirical evidence exists on its influence on salesperson job performance. Researchers interviewed salespeople of an international insurance company regarding mentoring and sales job performance. Using a qualitative research approach, Rollins et al. (2013) explored a mentor's influence on the sales job performance of the apprentice. Findings suggested that mentoring contributes to salesperson job performance in numerous ways (Rollins et al., 2014).

Guidice and Mero (2012) examined whether feedback on sales job performance was an accurate predictor to manager ratings. By conducting a study of 167 salespeople, results revealed that sales job performance and ratings of interpersonal facilitation was moderated only by the salespeople's political skill (Guidice & Mero, 2012). Sales job performance and manager ratings of task performance were related, interpersonal facilitation was negatively related to sales job performance (Guidice & Mero, 2012). This suggests that those who hedged their bets were less likely to achieve future sales goals (Guidice & Mero, 2012).

Related Studies

The 21st century brings a continual wave of constantly changing and developing technologies that influence the way people communicate, interact, and receive information (Grewal & Levy, 2012; Hughes, Bon, & Rapp, 2013). The effect such evolution of change will have on the emotional intelligence process in sales is yet to be fully understood (Grewal & Levy, 2012). As a framework, emotional intelligence has been widely researched with application in various fields and occupations (Ahmetoglu,

Leutner, & Chamorro-Premuzic, 2011; Borg & Freytag, 2012). Researchers have acknowledged the importance of emotional intelligence on job performance across its eighteen competencies. Nadler (2011) believed that effective management of emotions could even promote more successful professional endeavors.

The purpose of this quantitative correlational research study was to examine the relationship between emotional intelligence and sales performance of United States-based sales professionals. The independent variables were (a) emotional intelligence, (b) self-perception, (c) self-expression, (d) interpersonal, (e) decision making, and (f) stress management. The dependent variable was sales performance of United States-based technology sales professionals. The targeted population consisted of business-to-business technology sales professionals located throughout the United States. Since 2011, many quantitative correlational studies provided informative research comparing emotional intelligence and sales job performance. While many of these studies were completed in the financial services and healthcare industries, none were identified in the technology sector.

Financial Services Industry

Within the financial services sector, Enhelder (2011) investigated the relationship between emotional intelligence and sales performance among 717 financial advisors. All were employed at one large financial services firm and completed the Bar-On Emotional Quotient-Inventory (EQ-i) assessment. Results demonstrated a statistically significant relationship between emotional intelligence and financial advisor sales performance

(Enhelder, 2011). Researcher posited that firms employing financial advisors might want to use emotional intelligence assessments to predict future sales performance of job applicants (Enhelder, 2011). Using emotional intelligence results may also help develop emotional intelligence competencies of current staff (Enhelder, 2011).

Boyatzis, Good, and Massa (2012) assessed the level of emotional and social intelligence (ESI) competencies on sales leader performance within the financial services industry. Results indicated that ESI was a good predictor regarding leader effectiveness (Boyatzis et al., 2012). Specifically, adaptability and influence competencies predicted sales leadership performance (Boyatzis et al., 2012).

Successful sales professionals use emotions to enable positive outcomes for themselves and their customers. Kidwell et al. (2012) posited that emotions play a significant role in managing buyer-seller relationships. Three field studies were conducted to examine the influence of emotional intelligence on sales performance and customer relationships (Kidwell et al., 2012). Using their own emotional intelligence assessment tool, Emotional Intelligence in Marketing Exchange (EIME), researchers concluded that emotional intelligence had a significant relationship to the performance of real estate and insurance agents (Kidwell et al., 2012). Findings supported the supposition that sales professionals with higher emotional intelligence were superior revenue generators and better at retaining customers (Kidwell et al., 2012). Other results indicated a performance relationship exists between emotional intelligence and higher levels of cognitive ability (Kidwell et al., 2012).

Assessing the level of understanding of emotional intelligence among real estate professionals, Swanson and Zobisch (2014) identified 18 licensed realtors through LinkedIn and Facebook, who responded to 17 questions. Survey results concluded that "an awareness of emotional intelligence among licensed real estate professionals exists, and realtors could be trained on the topic of emotional intelligence" (Swanson & Zobisch, 2014, p. 9). Findings also reflected a relationship existed between emotional intelligence and realtor extrinsic motivation, namely economic rewards and client satisfaction (Swanson & Zobisch, 2014).

Haakonstad (2011) also studied the predictive relationship between emotional intelligence and sales performance of real estate professionals but had different results. Using the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), Haakonstad (2011) tested 75 real estate professionals. Results indicated that emotional intelligence did not relate statistically to sales performance, and that MSCEIT four branch scales did not explain a significant proportion of variance in sales performance (Haakonstad, 2011). *Using Emotions* subscale, did relate more strongly to sales performance than any other subscale.

Kidwell et al. (2011) proposed that the use of emotions by emotionally intelligent salespeople could affect buyer-seller exchanges in a positive way leading to increased performance. Kidwell et al. (2011) measured the levels of emotional intelligence and intellect of real estate and insurance salespeople in relation to their marketing exchange variables. Findings concluded that variables, such as customer orientation and influence

in the execution of sales, were higher with salespeople that had more effective emotional quotients (Kidwell et al., 2011). Indicating a relationship between high cognitive ability and high emotional intelligence, the results could be positively applied regarding selection, training, and improving customer interactions (Kidwell et al., 2011).

Healthcare Industry

Within the healthcare industry, Griffin (2013) investigated the relationship of 108 pharmaceutical sales managers' sales performance to their emotional intelligence. Sales performance was defined as the percent of annually attained sales goals compared to a predetermined sales objective. Measured using the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) 2.0 of emotional intelligence, results suggested that Branch 3 of emotional intelligence, *Understanding Emotions*, was a significant predictor of a sales managers' sales performance (Griffin, 2013).

Staying within the pharmaceutical sector, Billings (2012) evaluated which psychological and related cognitive characteristics predicted sales performance of 173 pharmaceutical representatives. Using the Emotional Intelligence Marketing Exchange (EIME) instrument and the Hermann Brain Dominance Instrument, results revealed a relationship between thinking style and emotional intelligence working together to increase sales performance (Billings, 2012). This link between thinking styles and emotional intelligence working together only occurred for study participants who were new to pharmaceutical sales (Billings, 2012).

Wanting to understand the relationship between 112 district sales managers' emotional intelligence and their behavioral style at bio-pharmaceutical company, Megowan (2012) used the DiSC® Classic 2.0 assessment to measure district sales managers' behavioral style, and the Bar-On Emotional Quotient Inventory (EQ-i) survey instrument. Results of the study did not demonstrate any direct correlation between leadership behavioral style and the corresponding level of emotional intelligence among district sales managers (Megowan, 2012). Assessing the emotional and social intelligence competencies of 115 sales professionals at a life sciences company and comparing results to participants' sales performance to determine if a correlation exists, Lisicki (2011) administered the Emotional Social Competency Inventory (ESCI) assessment. Results indicated a relationship between emotional intelligence toward job satisfaction and sales performance (Lisicki, 2011).

Farnham (2012) evaluated the relationship between sales performance and emotional intelligence of 35 hospice sales professionals employed by a regional hospice organization. Using the Bar-On Emotional Quotient Inventory (EQ-i) survey instrument, results indicated a relationship between emotional intelligence and hospice sales performance (Farnham, 2012). Specifically, each additional 1-point in EQ-i total score was associated with a .316-unit increase in sales (Farnham, 2012). Gender and tenure were determined to have no significant relationship with hospice sales performance (Farnham, 2012). Wanting to explore the relationship between emotional intelligence and self-reported sales performance of medical equipment sales representatives in the

United States, Harris, Mirabella, and Murphy (2012) assessed 136 participating sales representatives who had at least 12 months tenure at a medical equipment manufacturer. Using the Bar-On Emotional Quotient Inventory (EQ-i) survey instrument, results indicated that there were differences in emotional intelligence scores by gender and tenure, but there was no conclusive relationship between emotional intelligence and sales performance (Harris et al., 2012).

Other Industries

Within the call center environment, Shamsuddin and Rahman (2014) investigated the relationship between emotional intelligence (independent variable) and job performance (dependent variable) of 118 call center agents in Malaysia. Researchers used the self-report Wong and Law Emotional Intelligence Scale and discovered that there was a relationship between emotional intelligence and job performance (Shamsuddin & Rahman, 2014). Emotional intelligence dimensions of "*Regulation Appraisal Emotion* and *Use of Emotion* contributed significantly to job performance" (Shamsuddin & Rahman, 2014, p. 75). Wanting to understand the relationship between emotional intelligence and individual inbound call center performance of 17 agents, Gahan (2012) administered the Bar-On Emotional Quotient Inventory (EQ-i) assessment. Call center performance metrics included percent sales attainment, employee's monthly average deal size, employee's quality score, and adherence to assigned work schedule (Gahan, 2012). Researcher concluded that findings were inconclusive primarily from small sample size (Gahan, 2012).

Within Puerto Rico, De La Cruz, D'Urso, and Ellison (2014) evaluated if statistical significance existed between emotional intelligence and successful sales performance of 103 participants living in Puerto Rico. Using the Global Emotional Intelligence Test, results indicated that emotional intelligence had a statistical relationship to sales performance (De La Cruz et al., 2014). Correlation between variables was moderate (De La Cruz et al., 2014). Results also concluded that moderating variables did not produce any significant variation from original results (De La Cruz et al., 2014). Researchers generalized that emotional intelligence was an important yet not a determinant factor for sales success in Puerto Rico (De La Cruz et al., 2014).

Within retail sales, evaluating if 112 participating home furniture retail sellers emotional intelligence contributed to their sales performance, Giorgi, Mancuso, and Fiz Perez (2014) administered the Organizational Emotional Intelligence Questionnaire (ORG-EIQ). This survey instrument consisted of 99 questions that assessed emotional and organizational competencies using a self-report method (Giorgi et al., 2014). After four months, participants' sales results were compared with other criteria. Findings showed a significant relationship between emotional intelligence and top performers (Giorgi et al., 2014). Results also indicated that emotional intelligence skills were relevant in association with job performance, particularly *relationship management* and *self-management* branches (Giorgi et al., 2014).

Within higher education, studying 175 participating Spanish students from three universities, Sánchez-Ruiz, Hernández-Torrano, Pérez-González, Batey, and Petrides (2011) investigated the association between creativity, cognitive ability, personality, and trait emotional intelligence. Results concluded that strong relationships existed between creativity and emotional intelligence (Sánchez-Ruiz et al., 2011). Within recruiting services, Downey, Lee, and Stough (2011) administered the Swinburne University Emotional Intelligence Test to 100 participants in an Australian professional recruitment company to understand whether financial revenue performance earned were more strongly related to emotional intelligence rather than measures of intelligence quotient (IQ) and personality. Results concluded that emotional intelligence and personality were predictors of job performance with emotional intelligence being a strong indicator of job performance (Downey et al., 2011).

Within retail sales, Moon and Hur (2011) studied the ways in which emotional intelligence affected emotional exhaustion that could influence organizational commitment, job satisfaction, and job performance among 295 participating retail sales employees in South Korea. Using the Schutte Self-Report Emotional Intelligence Test, results indicated that employees' emotions, optimism levels, and social skills were negatively linked with emotional exhaustion (Moon & Hur, 2011). Emotional exhaustion was also found to be negatively linked to job performance (Moon & Hur, 2011).

Within the media industry, Roy and Chaturvedi (2011) evaluated the relationship that age and work experience had to emotional intelligence and performance of 270

participants from print media companies. Using the Emotional and Social Competence Inventory assessment, researchers divided participants into age and work experience groups to correlate these with the dependent variable of emotional intelligence. Results revealed that there was a significance in both age and work experience in relation to the level of emotional intelligence (Roy & Chaturvedi, 2011). Researchers commented that a peak of emotional intelligence was observed in people in the age group above 40 (Roy & Chaturvedi, 2011).

Wanting to understand if a correlation existed between emotional intelligence, transactional or transformational leadership styles, and sales performance, Brown (2014) investigated emotional intelligence and leadership styles on sales performance. Brown (2014) provided a descriptive analysis of literature that led to a conceptualized model of leadership style, emotional intelligence, and sales performance. Results suggested that a relationship exists between leadership style, emotional intelligence, and sales performance" (Brown, 2014).

Within the private sector, Chaudhry and Usman (2011) studied the association between emotional intelligence and job performance on 444 participating employees working in privately owned organizations. Emotional intelligence was measured through a self-reporting Likert scale consisting of 33 items while employee job performance was measured through a self-reporting Likert scale of 16 items (Chaudhry & Usman, 2011). Results exposed a significant relationship between emotional intelligence and job performance (Chaudhry & Usman, 2011). Researchers concluded that job performance

could be predicted based upon emotional intelligence scores; the use of an emotional intelligence assessment could be used to augment employee selection by human resource managers (Chaudhry & Usman, 2011).

Within national sales organizations, Russell and Walker (2011) hypothesized that salespeople possessing high emotional intelligence were more successful than their low emotional intelligence counterparts. Using the Schutte Self-Report Emotional Intelligence Test, researchers administered the assessment to 24 sales professionals and managers. Sales performance was measured by both self- and peer reports. Results concluded that emotional intelligence was positively related to sales performance; those salespeople with the highest emotional intelligence levels were found to have higher sales performance (Russell & Walker, 2011).

Wanting to understand the effect of emotional intelligence on the relationship of adaptive selling and customer loyalty to the salesperson, Chen (2011) analyzed the accumulated knowledge and explored research gaps in empirical sales research. Chen supposed that even though some studies proposed no link between emotional intelligence to sales performance, the prevailing view was that a higher level of emotional intelligence would have a positive effect on sales performance. Chen reviewed the use of emotional intelligence by salespeople not from the salesperson's point of view but rather the point of view of the customer. Findings indicated that, even though, little to no influence from the salesperson's viewpoint to the customer relationship was noted, an adverse effect from the customer point of view might have existed (Chen, 2011). Control of emotions

may have provided the opportunity for sales personnel to be more direct and pragmatic with customers. The lack of emotional or empathetic relationship with the customer may have affected the process in a negative way (Chen, 2011). Wanting to understand if there was a correlation between organizational citizenship behavior and emotional intelligence, Yaghoubi, Mashinchi, and Hadi (2011) revealed that a relationship exists between emotional intelligence and organizational citizenship behavior. This outcome indicated that emotional intelligence could have an influence on organizational development by creating a stronger consciousness of the organizational exchange among its citizens (Yaghoubi et al., 2011).

The debate over emotional intelligence's influence on job performance continues despite almost two decades of research about the topic. While many researchers provide statistical proof that emotional intelligence has an effect on job performance, others have revealed no statistical significance on job performance. Using a meta-analysis framework, Zhang and Wang (2011) assessed the influence of emotional intelligence on job performance. Studies evaluated were written in English and Chinese and conducted from 1990 to 2009. Results indicated that the relationship between emotional intelligence and job performance was moderately strong (Zhang & Wang, 2011).

Literature Review Conclusion

A review of the academic and professional literature served as the basis for the theoretical framework and variables used in this study. The review consisted of an examination of emotional intelligence and job performance theories, popular emotional

intelligence instruments, and emotional intelligence training. Since 2011, researchers' published six quantitative studies that studied the measurable results of emotional intelligence training. Researchers also published six quantitative studies since 2011 that studied sales job performance and the factors that influence positive results. Since 2011, researchers' published 25 quantitative studies investigating the relationship between emotional intelligence and sales performance with 20% reporting the use of Bar-On's Emotional Quotient-Inventory (EQ-i). Since 2011, no researchers have published studies evaluating the relationship between emotional intelligence and sales performance of technology sales professionals. The literature review was useful to highlight trends in research methods and benefits of academic research to bridge the gaps in knowledge for business leaders.

Transition

The purpose of this quantitative correlational research study was to examine the relationship between emotional intelligence and sales performance of United States-based sales professionals. Section 1 established the foundation or basis for the study and included the background, business problem, purpose statement, research questions, and theoretical framework. The literature review explored the existing body of knowledge and included fundamental findings between emotional intelligence and sales performance.

Section 2 outlines the role of the researcher, lists eligibility criteria for participants and describes the research method and design. Target population is named,

and sample size is calculated. Consideration and compliance to ethical standards are reviewed. Data collection instruments and techniques are described as are data analyses proposed methods. Section 2 concludes with a discussion on study reliability and validity. Section 3 includes presentation of the findings, a discussion regarding the applicability to professional practice, the implications for social change, recommendations for action and further research, reflections, and the conclusion of the study.

Section 2: The Project

This section outlines my role as researcher, lists the eligibility criteria for study participants, and describes the selected research method and design. It includes a description of my target population and shows the calculations that I made to determine an appropriate sample size. It also contains a review of the steps taken to consider and comply with ethical standards, and descriptions of the data collection instruments used. Section 2 concludes with a discussion on this study's reliability and validity.

Purpose Statement

The purpose of this quantitative correlational research study was to examine the relationship between emotional intelligence and sales performance of United States-based sales professionals. The independent variables were (a) emotional intelligence, (b) self-perception, (c) self-expression, (d) interpersonal, (e) decision making, and (f) stress management. The dependent variable was sales performance of United States-based technology sales professionals. The targeted population consisted of business-to-business technology sales professionals located throughout the United States. The intended business results of this study consisted of developing emotional intelligence sales training and recruitment programs that lead to higher sales quota attainment. These findings have social implications for sales and business leaders who may use these results to seek and hire emotionally intelligent sales professionals and train existing sales professionals about emotional intelligence competencies to improve company-wide sales performance.

Role of the Researcher

For quantitative research, the role of the researcher is to advance a theory, collect data to test, and report the confirmation or disconfirmation of the results (Bansel & Corley, 2012). My role as the researcher was to maintain objectivity in the data collection and analysis processes and to abide by ethical research practices (Bernard, 2013). This research study design evolved from an extensive review of academic and professional literature, and my familiarity with technology sales having participated in the industry for more than twenty years. Two United States-based technology sales population groups were sampled. My company's sales team, and my LinkedIn sales contacts participated. None of the technology sales professionals employed by my company, a $1.5 billion information technology services firm with 20,000 employees, worked for me directly. I did have interaction with many of them as the leader of a business segment.

I took several steps to ensure that I followed ethical guidelines to alleviate the risks of doing research in one's place of employment, as suggested by Hofmeyer, Scott, and Lagendyk (2012). For example, I took steps to ensure participant anonymity and separated myself from the data collection process to mitigate any potential bias in the survey process, per the recommendations of Menachemi (2011). I collected the company study data through an online demographic survey and emotional intelligence assessment named EQ-i 2.0® developed by Multi-Health Systems, Inc. (2011), to make sure that a strict adherence to participant confidentiality was observed. The company that I worked

for provided permission to sample their technology sales professionals (see Appendix A), and Multi-Health Systems, Inc. (MHS) provided permission to use their survey instrument (see Appendix B).

Wester (2011) indicated researchers must be cognizant of ethical issues that may arise during the research process. The Belmont Report summarized the ethical principles set forth in the 1974 National Research Act (Pub. L. 93-348), which governs the standards and acceptable practices when researching human subjects. Researchers must have respect for persons, beneficence, and justice. Because human subjects participated in this research study, the Walden University Institutional Review Board (IRB) required submission of an application for research ethics review. On May 21, 2015 IRB approval number 05-21-15-0244380 was provided (see Appendix C). The following day, data collection began and lasted for two weeks.

Participants

The eligibility criteria for research study participants included (a) being at least 18 years' old, (b) living in the United States, (c) working as a technology sales professional, and (d) receiving a sales performance evaluation for the previous fiscal year. Voluntary participation in this study included competent technology sales professionals' knowledgeable about the purpose of the study. According to Kjervik's (2009) definition of vulnerable populations, my study did not knowingly include any class of protected people. Although pregnant women may have completed the survey and assessment, none of the survey questions collected this information, removing any potential for bias.

Two United States-based technology sales population groups were sampled. My company's sales team, and my LinkedIn sales contacts participated. My company employment provided access to study participants. The company leadership approved my request to survey and assess their technology sales professionals (see Appendix A). Once I received approval to conduct research from Walden University's Institutional Review Board (see Appendix C), I contacted potential participants using the company email system. My company's Human Capital Group assigned a Resource Representative for me to coordinate with before, during, and after the assessment.

Several authors recommend establishing communication with the desired population before assessment when using an online survey and assessment to collect data, so as to improve the acceptable participant response rate (Chang, 2013; Puleston, 2011). Because I was mentioned in the recruitment materials, my employment may have served as a motivator to participate for some technology sales representatives at my company. My familiarity with LinkedIn participants did motivate participants, because it offered an opportunity to identify ways for participants to improve themselves and their company.

The technology sales professionals from my company and LinkedIn collectively made up a diverse group. Using this group as my research sample provided evidence of significant correlation between emotional intelligence and sales performance. Participants were permitted to receive results of their individual emotional intelligence assessment. My company established an email alias for participants to submit requests. I

used company provided de-identified email to send individual report results directly to the participants. LinkedIn participants contacted me directly for results.

Research Method and Design

I conducted a quantitative correlational research study to examine the relationship between emotional intelligence and sales performance of United States-based sales professionals. The independent variables were (a) emotional intelligence, (b) self-perception, (c) self-expression, (d) interpersonal, (e) decision making, and (f) stress management. The dependent variable was the sales performance of United States-based technology sales professionals.

Research Method

I selected a quantitative method as the best fit for assessing the relationship between emotional intelligence and sales performance of United States-based sales professionals, and resources available to complete the study. Quantitative research relies primarily on collecting and analyzing numerical data (Bansel & Corley, 2012; Cooper & Schindler, 2011), and are frequently used to determine relationships between variables (Bernard, 2013). Mengshoel (2012) suggested using a quantitative method when research requires the generation of variables to prove a hypothesis. The decision to use a quantitative method came from the need to evaluate the relationship between emotional intelligence and sales performance of United States-based sales professionals, and resources available to complete the study in a timely manner.

I did not select a qualitative or mixed methods study. Using a qualitative method would produce a rich description of the experiences (Erlingsson & Brysiewicz, 2013; Schleifer & Rothman, 2012) of United States-based technology sales professionals. Such a method would not permit testing whether emotional intelligence varied with sales performance. Mengshoel (2012) suggested the use of a mixed methods approach when combining a qualitative and quantitative method to enhance research outcomes. Conducting a mixed methods study would yield both comprehensive investigation of the situation or circumstance and theory testing (Bernard, 2013; Freshwater, 2014; Teddlie & Tashakkori, 2011; Zohrabi, 2013). To complete such a study would require more resources than available to me. Given business leaders have a limited understanding of the relationship between emotional intelligence and sales performance, using quantitative techniques was the best option available to test for a relationship between variables with limited resources.

Research Design

I considered experimental, descriptive, and correlational designs before selecting a correlational research design for this study. A quantitative study that explores relationships between variables must use a correlational design (McCusker, & Gunaydin, 2014; Pilcher & Bedford, 2011; Trusty, 2011). With experimental research, the focus is on determining if a particular treatment will influence an outcome by manipulating variables (Bansel & Corley, 2012; Larwin & Larwin, 2011). I eliminated an experimental design from consideration because this research was not intended to

manipulate either variable, but to discover if a relationship exists between the variables of emotional intelligence and annual sales performance. While descriptive designs examine the current condition of a situation or circumstance (Bernard, 2013; Borbasi & Jackson, 2012; Ingham-Broomfield, 2014; Revicki, & Schwartz, 2014), I instead examined the relationship among variables using numerical data. Because my research did not manipulate any variables, or describe the current state, a correlational design was the most appropriate strategy of inquiry for measuring the relationship between variables.

Population and Sampling

Two United States-based technology sales population groups were sampled. My company's sales team, and my LinkedIn sales contacts participated. This group of sales professionals aligned to the study research question by representing a blend of human characteristics while working in a sales environment requiring emotional intelligence. To conduct this study, I used a nonprobability purposeful sample of United States-based technology sales professionals working at my company and through my LinkedIn sales contacts. This was an appropriate technique based on the research question, quantitative method, and correlational design of this study. Purposive sampling is the recruitment of study participants based on certain criteria (Bernard, 2013). Suri (2011) defined purposeful sampling as a means to identify study participants who may provide an in-depth understanding of the research phenomenon. Purposive sampling is an inexpensive and practical method but restricts a researcher's ability to generalize results (Bernard, 2013).

Because purposive sampling is a nonprobability sampling method, there was a need for adequate sample sizing to alleviate validity and generalization concerns (Noordzij, Dekker, Zoccali, & Jager, 2011; Patterson & Morin, 2012). Determining the correct sample size requires finding appropriate values for statistical power, alpha, and effect size. Using G*Power 3.1.9 software, a sample size power analysis was conducted. G*Power 3.1 is open-source software created by the faculty at the Institute for Experimental Psychology in Dusseldorf, Germany (Faul, Erdfelder, Buchner, & Lang, 2009).

Statistical power is "the probability of rejecting the null hypothesis and speaks to the likelihood of confirming the alternative hypothesis or research hypothesis" (Liu, 2012, p. 427). High statistical power helps establish credibility regarding the research hypothesis (Liu, 2012). The accepted value for statistical power is 80% (Bernard, 2013). In psychological research, the standard alpha level (α) is .05, which means there would be a 95% chance the correct conclusion was reached (Noordzij et al., 2011). A trade-off exists between Type I and Type II errors. Type 1 error rejects the null hypothesis when it is true. Type II error rejects an alternative hypothesis when it is true. To preserve credibility, it is important that the sensitivity of the test be set so it would detect any real relationships by rejecting the null hypothesis when it is false (Noordzij et al., 2011). Effect size is a quantitative consideration of phenomenon magnitude (Kelley & Preacher, 2012). Prior studies of emotional intelligence and job performance found a medium effect size (Griffin, 2013).

An apriori power analysis was conducted. Assuming a medium effect size (f^2 = .20) and standard alpha level (α = .05), with six predictor variables, results indicated a minimum sample size of 75 participants required to achieve a power of .80. Increasing the sample size to 111 would increase power to .95. I sought between 75 and 111 participants for the study (Figure 2).

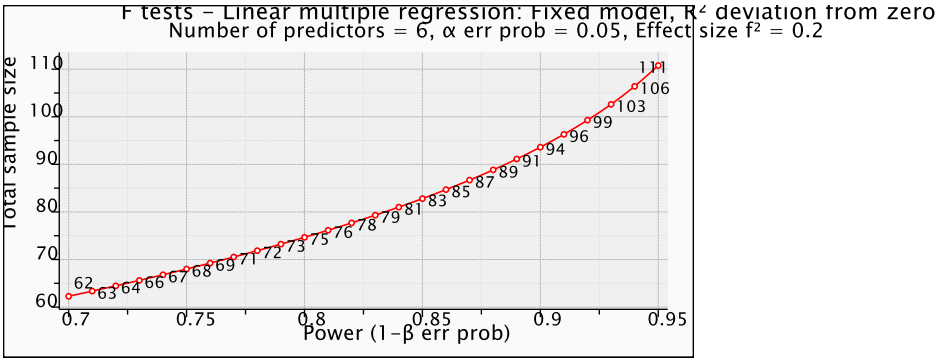

Figure 2. Power as a function of sample size.

With a well thought through plan, "online survey data can be equal or superior to that of equivalent paper survey data" (Chang, 2013, p. 121). With 329 eligible participants, 210 through LinkedIn and 119 through my company, achieving the required sample of 75 respondents necessitated a response rate of 23%. Online surveys have an average response rate between 24% - 30% (Sanchez-Fernandez, Munoz-Leiva, & Montoro-Rios, 2012). Study participation exceeded the required sample size.

Ethical Research

Electronic communication was sent to technology sales representatives before, during, and after the emotional intelligence assessment. Electronic communication sent prior to the assessment period explained the voluntary nature of the study, its purpose and intended use, and confidentiality and privacy (see Appendix D). Guidelines established by Walden University's Institutional Review Board were followed. Completion of the study's survey and assessment instruments by participants was voluntary.

Participants had the right to withdraw before, during, and after the assessment. No participants withdrew during or after the assessment. Informed consent and invitation emails were sent to participants (see Appendix E). Within the invitation email, participants were notified that they had the right to withdrawal from the study up to 45 days. Once inside MHS' web portal, participants were asked to read and agree to "click to" informed consent. By not clicking and agreeing to continue, participants were unable to take the assessment whereby withdrawing from the study.

No incentives were offered for participating. Respondent results were kept in strict confidence by me. Although MHS retained the right to use and publish nonidentifiable data, they also acknowledge that they protect any transmitted personal information. Related researcher guidelines that protect participants and ensure an ethical study were followed per Murray (2014). All information related to participants' results were downloaded to a password-protected storage device and are stored in a locked file

for five years, at which point all associated data will be destroyed. Walden University IRB approval number is 05-21-15-0244380 (see Appendix C).

Data Collection Instruments

Demographic Survey

The eligibility criteria for research study participants included (a) being at least 18 years' old, (b) living in the United States, (c) working as a technology sales professional, and (d) receiving a sales performance evaluation for the previous fiscal year. Eligible participants received an informed consent and invitation email (see Appendix E). Once inside MHS' web portal, participants were asked to read and agree to "click to" informed consent. By not clicking to continue, participants were unable to take the assessment whereby withdrawing from the study. Participants were then asked to provide either their full name or reference identification. Next, four optional demographic questions were asked. Questions included age, gender, occupation group, and occupation code. MHS uses this data to normalize the dataset. Collecting demographic information is a routine survey method; the information can be used for both descriptive and statistical analyses (Bernard, 2013). Once this optional demographic survey was completed, participants were provided instructions on how to take the survey. By not clicking to continue, participants were unable to take the emotional intelligence assessment whereby withdrawing from the study.

EQ-i 2.0® Assessment

I selected the online version of the EQ-i 2.0® (Multi-Health Systems, Inc., 2011). Available for use since 2011, permission was granted by MHS to administer and score participant results (see Appendix B). The EQ-i 2.0® was designed as a norm-referenced forced-choice instrument to measure social skills (Multi-Health Systems, Inc., 2011). These skills impact the way individuals develop and maintain relationships and cope with stressful situations (Multi-Health Systems, Inc., 2011). The EQ-i 2.0® can be administered to participants in a variety of occupational settings (Multi-Health Systems, Inc., 2011).

The EQ-i 2.0® provided an emotional intelligence score, based on the Self-Perception, Self- Expression, Interpersonal, Decision Making, and Stress Management composite scale scores (Multi-Health Systems, Inc., 2011). The Self-Perception composite scale score included emotional self-awareness, self-regard, and self-actualization subscales (Multi-Health Systems, Inc., 2011). The Self-Expression composite score included emotional expression, assertiveness, and independence subscales (Multi-Health Systems, Inc., 2011). The Interpersonal composite score is based on interpersonal relationships, empathy, and social responsibility subscales (Multi-Health Systems, Inc., 2011). The Decision Making composite score is calculated using the scores from impulse control, problem-solving, and reality testing subscales (Multi-Health Systems, Inc., 2011). The Stress Management composite score is based on

flexibility, stress tolerance, and optimism subscale scores (Multi-Health Systems, Inc., 2011).

By selecting the online version of the EQ-i 2.0® emotional intelligence assessment, I evaluated the research question regarding the relationship between emotional intelligence and sales performance. Although participants were geographically dispersed, they all had access to a computer and Internet connectivity. Eligible participants received an informed consent and invitation email (see Appendix E), which contained a link to MHS secure online portal. Once accessed, participants were asked again to read and agree to "click to" informed consent. By not clicking to continue, participants were unable to take the survey and assessment whereby withdrawing from the study. Assessment took no more than 30 minutes to complete.

The EQ-i 2.0® includes a 133-item emotional intelligence model that uses a five-point Likert ordinal scale with responses that ranges from (1) "never/rarely" to (5) "always/almost always" (Multi-Health Systems, Inc., 2011). The EQ-i 2.0® provides an emotional intelligence score, based on the Self-Perception, Self- Expression, Interpersonal, Decision Making, and Stress Management branch scale scores (Multi-Health Systems, Inc., 2011). A raw score was calculated and compared to the mean and standard deviation for the particular branch scale (Multi-Health Systems, Inc., 2011). MHS does not publish the mean and standard deviation for each branch scale. MHS does provide formula: Standard Score = (raw score – M)/SD x 15 + 100. Employing a 1-5-15 factor structure, the EQ-i 2.0® features one total emotional intelligence score, five

composite scores, and 15 subscale scores (Multi-Health Systems, Inc., 2011). For the purposes of this study, only emotional intelligence and composite scale scores will be used because of their preferred psychometric properties.

Scoring used to interpret results of this study was consistent with the methods employed by the EQ-i 2.0® Workplace Report (Multi-Health Systems, Inc., 2012). MHS reports that a score of 70 to 90 is considered in the low range of emotional intelligence and indicates an opportunity for personal development. MHS reports that a score of 91 to 110 is a mid-range score. Any score above 110 indicates a high score (Multi-Health Systems, Inc., 2012); individuals with scores in this range demonstrated good emotional intelligence. Any score below 100 is a potential target area for development (Multi-Health Systems, Inc., 2012).

The instrument was developed using large heterogeneous samples. MHS reports that the EQ-i 2.0® normative sample includes ten age ranges (400 cases in each age range), equally proportioned by gender. MHS reports that the normative sample is similar to the Censuses (within 3%) regarding race/ethnicity, geographic region, and education level. The United States/Canada Professional normative group was used for scoring purposes. Participants' scores were compared with other North American professionals, versus the general population. It was possible to use this particular normative group since eligible participants included highly educated technology sales professionals.

Within the past five years, researchers studying the relationship between emotional intelligence and sales performance have used Bar-On's EQ-i as their preferred emotional intelligence measurement. For example, Enhelder (2011) investigated the relationship between emotional intelligence and sales performance among 717 financial advisors. Results demonstrated a statistical relationship between emotional intelligence and financial advisor sales performance (Enhelder, 2011). Farnham (2012) studied the relationship between sales performance and emotional intelligence of 35 hospice sales professionals. Results indicated a relationship between emotional intelligence and hospice sales performance (Farnham, 2012). Harris et al. (2012) assessed the relationship between emotional intelligence and sales performance among 136 medical sales representatives. Results indicated differences in emotional intelligence scores by gender and tenure, but showed no statistical relevance between emotional intelligence and sales performance.

The EQ-i 2.0® is a valid and reliable measurement of emotional intelligence (Multi-Health Systems, Inc., 2011). For multiple-item scales, the most frequently reported reliability statistic is Cronbach's coefficient alpha (Eisinga, Grotenhuis, & Pelzer, 2012). The alpha value of the Emotional Intelligence Score is 0.97, with composite scales ranging from 0.88 to 0.93 (Multi-Health Systems, Inc., 2011). Values above 0.7 are considered acceptable (Tavakol & Dennick, 2011). A reported 90% confidence interval is used for the EQ-i 2.0® scores (Multi-Health Systems, Inc., 2011). Indicating the EQ-i 2.0® is a stable assessment of emotional intelligence, test-retest

correlations ranged from (r = 0. 92) for 2 to 4 week values, and from (r = 0.81) for 8 week values (Multi-Health Systems, Inc., 2011).

Content validity demonstrates all aspects of the emotional-social inventory construct are captured by the EQ-i 2.0® (Multi-Health Systems, Inc., 2011). MHS reports that the EQ-i 2.0® is correlated with the original EQ-i but does not correlate with measures of ability-based emotional intelligence assessment such as MSCEIT. No racial or ethnic bias was found in the EQ-i 2.0® (Multi- Health Systems, Inc., 2011). The factor structure was validated using exploratory and confirmatory factor analyses (Multi-Health Systems, Inc., 2011).

For this research study, no modifications were made to the EQ-i 2.0® survey instrument. Permission to use EQ-i 2.0® was received by MHS (see Appendix B). Scored study group results were downloaded by me. The EQ-i 2.0® survey instrument was chosen based on its psychometric properties of reliability and validity, past use measuring the relationship between sales performance and emotional intelligence, and ease of administering online to a geographically dispersed target population.

Data Collection Technique

The data collection techniques used included an online survey and emotional intelligence assessment, and company provided and LinkedIn self-reported sales performance data. Accessed through an electronically mailed website link, online survey and assessment site were securely hosted by MHS whom I contracted with to administer, collect, and analyze results. According to Cooper and Schindler (2011), the convenience

of electronic communication makes research topics more accessible because of the ease of instrument dissemination and data gathering. Surveys are also a cost-effective way of collecting data (O'Rourke, 2011). Sanchez-Fernandez et al. (2012) stated that online surveys have an average response rate between 24% - 30%. Web-based surveys can produce lower response rates than mail surveys (Sauermann & Roach, 2013).

Through intercompany email, my company's Human Capital Group provided me with a Microsoft Excel spreadsheet containing its eligible de-identified technology sales professionals' contact and sales performance data. Using my LinkedIn account, I had connections to 210 United States-based technology sales professionals. LinkedIn participants emailed me their self-reported sales performance. Electronic information collected was securely hosted on my password protected home office computer. The eligibility criteria for research study participants included (a) being at least 18 years, (b) living in the United States, (c) working as a technology sales professional, and (d) receiving a sales performance evaluation for the previous fiscal year. Specific information provided by my company's Human Capital Group included (a) an anonymous employee reference identification number, (b) de-identified, anonymous email address, (c) job classification title, and (d) the individual's percent attainment to in year revenue target for fiscal year ending March 31, 2015. For job classification, client management was defined as owners of account profit and loss while sales management was defined as owners of new account acquisition.

Permission was obtained from MHS to administer the EQ-i 2.0® assessment through its secure website (see Appendix B). MHS hosted results in a password protected web portal and provided scored results upon my request. Using administrator login credentials supplied by MHS, I created a secure research project site. Using de-identified email addresses provided to me by my company, informed consent and invitations were sent to individual participants from this site (see Appendix E). Informed consent and invitations were also sent to LinkedIn participants from this site. Invitations included a unique reference identification number and secure website address for participants to select. Once selected, respondents were sent to the secure research website to take the optional demographic survey and emotional intelligence assessment.

Upon completion of the two week assessment, results were downloaded by me to my home office computer. Specific post assessment information provided by MHS but not limited to included (a) employee reference identification number, (b) age, (c) gender, (d) emotional intelligence score, (e) self-perception composite scale score, (f) self-expression composite scale score, (g) interpersonal composite scale score, (h) decision making composite scale score, and (i) stress management composite scale score. Company participant data was de-identified to protect the security and confidentiality of respondents. All research files are kept on a password protected home computer. This computer is in my home office and not accessible to the public. Participants' results were archived to a password protected storage device and stored in a locked cabinet. After five years, I will destroy all associated project data.

Data Analysis

The overarching research question for this study was: What is the relationship among emotional intelligence, self-perception, self-expression, interpersonal, decision making, stress management, and sales performance?

The six hypotheses proposed for this study included:

$H1_0$: There is no statistical relationship between a United States-based technology sales professional's emotional intelligence score and sales performance.

$H1_a$: There is a statistical relationship between a United States-based technology sales professional's emotional intelligence score and sales performance.

$H2_0$: There is no statistical relationship between a United States-based technology sales professional's self-perception composite score and sales performance.

$H2_a$: There is a statistical relationship between a United States-based technology sales professional's self-perception composite score and sales performance.

$H3_0$: There is no statistical relationship between a United States-based technology sales professional's self-expression composite score and sales performance.

$H3_a$: There is a statistical relationship between a United States-based technology sales professional's self-expression composite score and sales performance.

$H4_0$: There is no statistical relationship between a United States-based technology sales professional's interpersonal composite score and sales performance.

$H4_a$: There is a statistical relationship between a United States-based technology sales professional's interpersonal composite score and sales performance.

$H5_0$: There is no statistical relationship between a United States-based technology sales professional's decision making composite score and sales performance.

$H5_a$: There is a statistical relationship between a United States-based technology sales professional's decision making composite score and sales performance.

$H6_0$: There is no statistical relationship between a United States-based technology sales professional's stress management composite score and sales performance.

$H6_a$: There is a statistical relationship between a United States-based technology sales professional's stress management composite score and sales performance.

I used Statistical Packages for the Social Sciences (SPSS) version 21, a proprietary software produced by IBM©, for data analysis. By merging my company's technology sales professionals' eligibility dataset (stored in a Microsoft Excel spreadsheet) with MHS survey and assessment results (also stored in a Microsoft Excel spreadsheet), I created a company master file. By merging LinkedIn's technology sales professionals' self-reported dataset with MHS survey and assessment results, I created a LinkedIn master file. Combining both master files created a study master file, which was used to conduct data analysis. For the purposes of this study, SPSS accounted for missing data, generated descriptive statistics, created histograms and scatterplots, and conducted correlational and multiple regression analyses.

Descriptive statistics were conducted on both categorical and continuous variables. Categorical variables included job classification title and gender. Frequency and percentages were conducted for categorical variables. Continuous variables include

(a) percent attainment to previous year's revenue target, (b) age, (c) emotional intelligence score, (d) self-perception composite scale score, (e) self- expression composite scale score, (f) interpersonal composite scale score, (g) decision making composite scale score, and (h) stress management composite scale score. Minimum and maximum scores, mean, standard deviation and Cronbach alpha reliability were conducted on the continuous variables. Cronbach alpha values above 0.70 demonstrate acceptable internal consistency reliability for the sample scale (Cho & Kim, 2015).

Answers to the demographic survey and emotional intelligence assessment produced ordinal and nominal, nondichotomous, data. This type of data is suitable for testing by means of inferential statistics (Nayak & Hazra, 2011). Inferential statistics use both normally distributed parametric (e.g., *t*-test, ANOVA, Pearson *r* correlation) and nonparametric techniques (e.g., Spearman rho, Kruskal-Wallis, Mann-Whitney U, Chi-square). Examination of the research variables from one sample population without manipulation, indicate that the most appropriate statistical tests to understand the relationship between emotional intelligence scores (independent variable) and sales performance (dependent variable) were correlation and regression analyses.

Prior to performing a correlation analysis to assess hypotheses 1-6, a scatterplot analysis was conducted to ensure assumptions of linearity and homoscedasticity were met. If nonlinear distributed data was confirmed, a Spearman rho correlation test would be used. Otherwise, a Pearson correlation test was conducted. Variables include (a) job classification title, (b) percent attainment to in year revenue target for previous fiscal

year, (c) age, (d) gender, (e) self-perception composite scale score, (f) self-expression composite scale score, (g) interpersonal composite scale score, (h) decision making composite scale score, (i) stress management composite scale score, and (j) emotional intelligence score.

The Pearson correlation coefficient calculation returns a value between -1 and +1, with "0" denoting no relationship at all (Prion & Haerling, 2014). The higher the absolute value of the number, the stronger the relationship between the two variables (Lind, Marchal, & Wathen, 2012). Within this study, the closer the Pearson (*r)* gets to zero, the more likely the null hypothesis will not be rejected. The further the Pearson (*r)* moves away from zero and closer to absolute 1, the more significant the relationship between the variables and the more likely the null hypothesis will be rejected. The relationship described by a correlation coefficient does not imply causality between the two variables. The level of statistical significance, *p*-value, indicates how much confidence is placed on the results accuracy. According to Lind et al. (2012), the *p*-value is the probability, based on the observation of the sample, which the null hypothesis is rejected. Evidence that would support a rejection of the null as significant would be a *p*-value less than 0.05.

To assess predictability of independent variables over the dependent variables, standard multiple regression analysis was used. Independent continuous predictor variables included (a) emotional intelligence score, (b) self-perception composite scale score, (c) self- expression composite scale score, (d) interpersonal composite scale score,

(e) decision making composite scale score, and (f) stress management composite scale score. Dependent categorical variables included the individual's percent attainment to in year revenue target for previous fiscal year. Sample size, multicollinearity, and outliers were checked to ensure appropriate use of multiple regression analysis. To test for high intercorrelations among predictor (independent) variables, I ran collinearity diagnostics.

Missing data can weaken the representativeness of the sample, which may negatively affect the reliability of the results, such as biasing inferences (Fleming, 2011). To counter this possibility, weekly meetings with my company's Human Capital Group were scheduled before, during, and after the assessment. My company provided complete data. Missing EQ-i 2.0® data was a concern because it could reduce the test's validity. Although MHS permits participants to proceed when questions are skipped on its survey or EQ-i 2.0® assessment, emotional intelligence scores and branch scores were not generated if missing data reached 8% (Multi-Health Systems, 2011). If participants exited the EQ-i 2.0® and did not return before the assessment taking window closed, no scores were generated for that participant.

Study Validity

A research study's reliability and validity are dependent on the instruments and processes adopted. Best practices exist for protecting and enhancing a study's reliability and validity. Consideration and planning to address challenges with reliability and validity are best addressed during a study's design phase (Bernard, 2013).

Research study reliability mirrors the consistency of a study and its instrumentation. Researchers should verify instruments for reliability (Bhattacherjee, 2012). As discussed in the preceding section on data collection instruments, MHS reports that the EQ-i 2.0® is a valid and reliable measurement of emotional intelligence. Cronbach's coefficient alpha value of the Emotional Intelligence Score is 0.97, with composite scales ranging from 0.88 to 0.93 (Multi-Health Systems, Inc., 2011). Values above 0.7 are considered acceptable (Tavakol & Dennick, 2011). To ensure instrument reliability on my study sample, I used SPSS to compute Cronbach's alpha and reported the results in Section 3, "Presentation of Findings." By presenting participants with clear instructions on how to complete the survey and assessment, collecting reliable data from respondents is increased (Fan & Yan, 2010). The risk of researcher error diminishes and study reliability increases because of such controls (Barends, Janssen, ten Have, & ten Have, 2013; Fan & Yan, 2010).

Through study design, an optimal balance between internal and external validity can exist (Bhattacherjee, 2012). Cantrell (2011) warned that improving a study's internal validity could diminish its external validity. Studies attempting to prove a relationship between cause and effect that do not employ random sampling are susceptible to internal validity concerns (Bernard, 2013). This study included a nonprobabilistic purposeful sample of United States-based technology sales professionals working at my company and through my LinkedIn connections. Including eligibility criteria for study participation can improve internal validity (Cantrell, 2011).

According to Bernard (2013), to improve external study validity, researchers should consider increasing the sample size, selecting a population representative of the general population, and conducting a multi-year study. To increase my sample size, technology sales professionals employed by my company received an awareness email prior to an invitation to participate in this study. This sample group of sales professionals aligned to the study research question by representing a blend of human characteristics while working in a sales environment requiring emotional intelligence. Given this was not a long-term study, this threat to external validity remains.

If the study theories selected relate to the participants selected, construct validity in a nonexperimental study can be achieved (Stone-Romero, 2010). By deciding to study if a relationship exists between emotional intelligence and sales performance, I tested emotional intelligence theory. The EQ-i 2.0® instrument reported high construct validity through common factor analysis (Multi-Health Systems, Inc., 2011). The literature supports the use of this instrument when studying emotional intelligence and sales performance (Enhelder, 2011; Farnham, 2012; Megowan, 2012), and ensures construct validity (Bernard, 2013). Construct validity requires reasonable measurement of the construct (Hair, Celsi, Money, Samouel, & Page, 2011). Internal validity involves credibility of the variable development and developing causal and logical deductions. (Bleijenbergh, Korzilius, & Vershuren, 2011).

Statistical validity depends on a sufficient sample size, using the right statistical tests to analyze collected data, using the correct level of statistical power, and

determining the correct Type I error rate (Barends et al., 2013). For this study, an apriori power analysis was conducted using G*Power 3.1.9 software to calculate sufficient sample size. By selecting Pearson's correlation coefficient (*r*) and linear multiple regression as the statistical tests, the statistical validity of this study was improved.

Transition and Summary

The purpose of this quantitative correlational research study was to examine the relationship between emotional intelligence and sales performance of United States-based sales professionals. Section 2 outlined my role as researcher, listed eligibility criteria for participants, and described reasoning behind selection of a quantitative correlational study design. Two United States-based technology sales population groups were sampled. Required sample size was calculated to be 75. Consideration and compliance to ethical standards were reviewed. Data collection instruments and techniques were described as were data analyses proposed methods. Section 2 concluded with a discussion on study reliability and validity. Section 3 includes presentation of the findings, a discussion regarding the applicability to professional practice, the implications for social change, recommendations for action and further research, reflections, and the conclusion of the study.

Section 3: Application to Professional Practice and Implications for Change

This section provides a brief overview of the study and a presentation of the findings. Discussion of how applicable these results are to professional practice, and an exploration of how these findings can influence technology sales professionals' wellbeing and the customers they serve is explored. This section also includes recommendations for action and opportunities for further study, and concludes with my reflections and closing remarks.

Overview of the Study

The purpose of this quantitative correlational research study was to examine the relationship between emotional intelligence and sales performance of United States-based sales professionals. This study used inferential statistics (Pearson's coefficient and multiple linear regression analysis) to test for the existence of a relationship between the variable scores of emotional intelligence, self-perception, self-expression, interpersonal, decision making, stress management, and sales performance. Following best procedures for ensuring statistically valid results (Bernard, 2013), the *p*-value for these tests was set to 0.05. Results demonstrated a significant association measured between decision making and sales performance ($r = .310$, $p < .01$). No associations existed between emotional intelligence and sales performance ($r = .229$, $p = ns$); self-perception and sales performance ($r = -.157$, $p = ns$); self-expression and sales performance ($r = .212$, $p = ns$); interpersonal and sales performance ($r = .094$, $p = ns$); and stress management and sales performance ($r = .225$, $p = ns$).

For all six predictor variables, the regression model was not a significant predictor of sales performance, $F(6,66) = 1.295$, $p = .272$, $R^2 = .105$. By including only decision making, the linear regression model was a significant predictor of sales performance, $F(1,71) = 7.550$, $p < .01$, $R^2 = .096$. The conclusion from this analysis is that decision making holds significance in achieving sales performance.

Presentation of the Findings

The overarching research question for this study was: What is the relationship among emotional intelligence, self-perception, self-expression, interpersonal, decision-making, stress management, and sales performance?

The six hypotheses for this study were:

- $H1_0$: There is no statistical relationship between a United States-based technology sales professional's emotional intelligence score and sales performance.
- $H1_a$: There is a statistical relationship between a United States-based technology sales professional's emotional intelligence score and sales performance.
- $H2_0$: There is no statistical relationship between a United States-based technology sales professional's self-perception composite score and sales performance.
- $H2_a$: There is a statistical relationship between a United States-based technology sales professional's self-perception composite score and sales performance.
- $H3_0$: There is no statistical relationship between a United States-based technology sales professional's self-expression composite score and sales performance.

- $H3_a$: There is a statistical relationship between a United States-based technology sales professional's self-expression composite score and sales performance.
- $H4_0$: There is no statistical relationship between a United States-based technology sales professional's interpersonal composite score and sales performance.
- $H4_a$: There is a statistical relationship between a United States-based technology sales professional's interpersonal composite score and sales performance.
- $H5_0$: There is no statistical relationship between a United States-based technology sales professional's decision making composite score and sales performance.
- $H5_a$: There is a statistical relationship between a United States-based technology sales professional's decision making composite score and sales performance.
- $H6_0$: There is no statistical relationship between a United States-based technology sales professional's stress management composite score and sales performance.
- $H6_a$: There is a statistical relationship between a United States-based technology sales professional's stress management composite score and sales performance.

Prior to the beginning of data collection, my company lowered the number of eligible technology sales professional participants to 119. The loss of eligible participants was attributed to year-end attrition. Because this change would require an unlikely 63% survey response rate to achieve the desired sample size of 75 participants, I recruited a second sample group using my LinkedIn contacts. Since 2004, I have stayed in contact with 210 United States-based technology sales professionals through LinkedIn. Informed consent and invitation emails were sent to all eligible LinkedIn contacts

requesting participation and explaining eligibility criteria. Over a 2-week assessment period, participants completed the survey and sent me self-reported sales performance data through email.

In total, I sent invitations to 329 eligible participants: 210 through LinkedIn and 119 through my company. From LinkedIn, 51 participants completed the survey, with 44 of them also supplying self-reported sales performance data. From my company, 42 participants completed the survey with my company supplying sales performance data on all. The response rate for this research study was 26%, 86 completed out of 329 invitations. This response rate exceeded the minimum sample needed for statistically valid results, which was established at 75 respondents per G*Power 3.1. The returned sample size of 86 was large enough to support the study with a confidence level of 95% and a statistical power of .80, per the best procedures described by Bernard (2013) and Sanchez et al. (2012).

Descriptive Statistics

Table 1 shows the demographic details for the participants of this study. Age and gender data were captured during the optional online demographic survey. For job classification, my company provided that description with participant sales performance data. LinkedIn participants were asked to self-categorize when reporting their sales performance data. Among combined sample of respondents, nine in ten were male (92.5%). LinkedIn (93.2%) and my company (91.7%) had similar male participation rates. Study participants' gender breakdown was similar to gender patterns found in other

studies examining emotional intelligence and sales performance (Griffin, 2013; Haakonstad, 2011). Comparisons to similar studies provide context and assistance in understanding this study's results.

The combined sample revealed that those in their forties represented four in 10 (42.7%) of the respondents, followed by those in their fifties (29.3%) and those in their thirties (20.0%). While the LinkedIn sample resembled the combined aged outcomes, the company sample varied. Leading with respondents in their forties, the company sample followed with those in their thirties (29.4%), and those in their fifties (26.5%). Distribution of study participants' age mirrored those of other studies examining emotional intelligence and sales performance (Griffin, 2013; Megowan, 2012).

For role, client management was defined as owners of account profit and loss while sales management was defined as owners of new account acquisition. Sales management made up slightly more than half of all participants (54.7%). While the LinkedIn sample resembled the combined role outcomes (61.4%), the company sample had slightly more client management professionals respond (52.4%). This role similarity extended to studies examining emotional intelligence and sales performance (De La Cruz et al., 2014; Farnham, 2012; Gahan, 2012; Griffin, 2013). The demographic data shown in Table 1 revealed respondents were primarily male, middle-aged, and served in sales management.

Table 1

Demographic Description of Sample

Variable		Combined		LinkedIn		Company	
		n	Valid %	*n*	Valid %	*n*	Valid %
Gender							
	Male	74	92.5	41	93.2	33	91.7
	Female	6	7.5	3	6.8	3	8.3
	Missing	6		0		6	
Age	31-39	15	20.0	5	12.1	10	29.4
	40-49	32	42.7	20	48.9	12	35.3
	50-59	22	29.3	13	31.7	9	26.5
	60+	6	8.00	3	7.3	3	8.8
	Missing	11		3		8	
Role	Client Mangement	39	45.3	17	38.6	22	52.4
	Sales Management	47	54.7	27	61.4	20	47.6
	Missing	0		0		0	

Note. $N = 86$.

The second portion of the online survey, the EQ-i 2.0® (Multi-Health Systems, Inc., 2011), provided data on technology sales professionals' emotional intelligence. Tables 2 and 3 report participants' emotional intelligence scores and sales performance expressed as percent attainment of previous years' revenue objective. Combined emotional intelligence scores had a median of 108.00 and a standard deviation of 12.15, indicating participants scored on the higher end of the average range. LinkedIn sample median was higher (111.00) than the company (106.00). Combined sales performance

achievement had a median of 0.86 (86%) and a standard deviation of 0.61. LinkedIn sample self-reported median was higher (0.90) than the company (0.77). In this study, the distribution of emotional intelligence and sales performance scores mirrored those of other studies (Griffin, 2013).

Table 2

Descriptive Statistics for Population Samples

	LinkedIn				Company			
Variable	Min	Max	*Mdn*	*SD*	Min	Max	*Mdn*	*SD*
Emotional Intelligence	61.00	128.00	111.00	13.460	81.00	122.00	106.00	10.493
Self-Perception	70.00	123.00	110.00	12.958	69.00	118.00	105.00	10.001
Self-Expression	69.00	129.00	109.50	12.946	74.00	122.00	102.50	13.017
Interpersonal	68.00	126.00	109.00	14.055	81.00	121.00	104.50	10.426
Decision Making	68.00	125.00	107.00	13.029	75.00	126.00	107.00	11.894
Stress Management	59.00	128.00	111.00	12.659	75.00	124.00	104.50	9.952
Sales Performance	0.00	3.40	0.90	0.502	0.00	4.12	0.77	0.698

Note. $N = 86$.

Table 3

Descriptive Statistics for Continuous Variables

	Combined			
Variable	Min	Max	*Mdn*	*SD*
Emotional Intelligence	61.00	128.00	108.00	12.149
Self-Perception	69.00	123.00	107.50	11.570
Self-Expression	69.00	129.00	106.00	13.211
Interpersonal	68.00	126.00	105.50	12.464
Decision Making	68.00	126.00	107.00	12.417
Stress Management	59.00	128.00	107.00	11.471
Sales Performance	0.00	4.12	0.86	0.605

Note. $N = 86$.

To prepare for an accurate analysis of parametric statistical methods, normal distribution of the data under analysis must be required (Hair et al., 2011; Siddiqi, 2014). For all continuous variables, histograms, normality plots, skewness, kurtosis, and Shapiro-Wilk tests were conducted. To bring variables into normality, scores from extreme outliers were removed from sales performance, self-perception, self-expression, decision making, and stress management. Data transformation was also performed on the self-

perception variable. Figures 3 and 4 show histograms for emotional intelligence and sales performance scores.

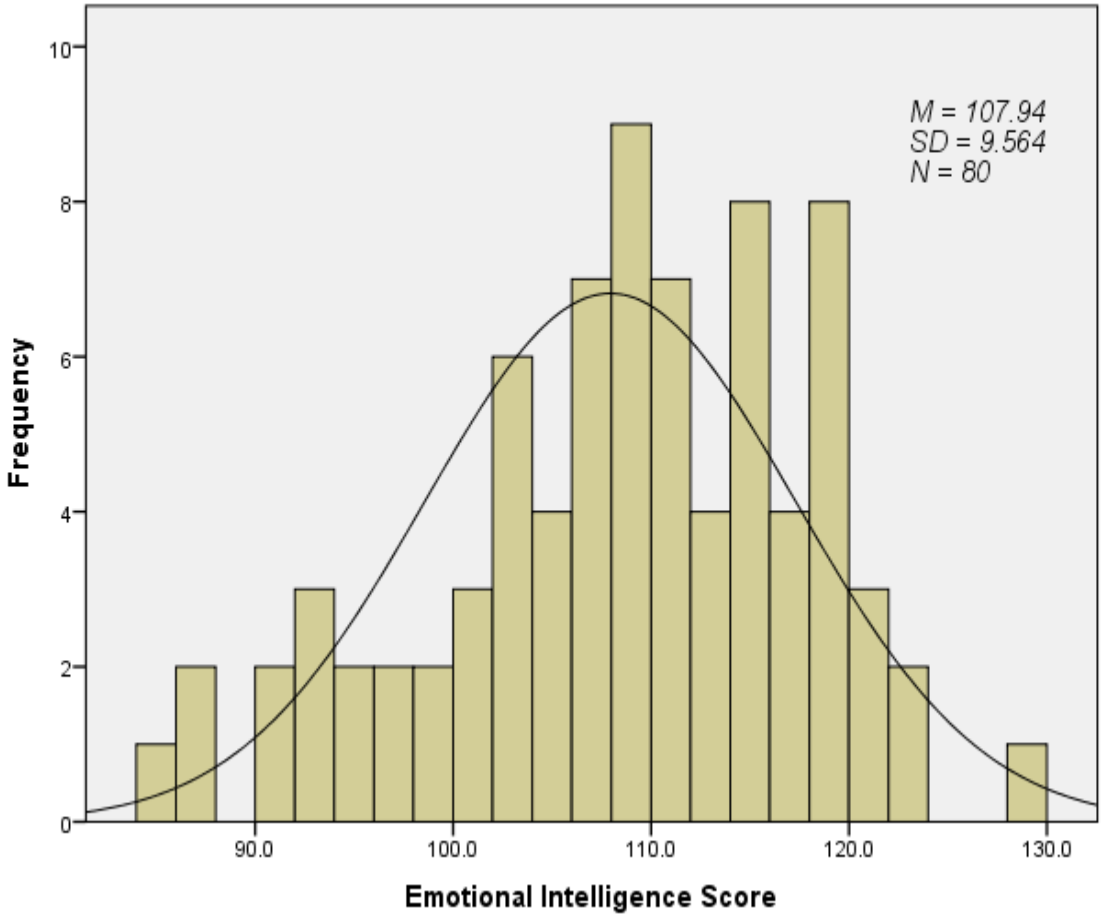

Figure 3. Histogram showing the distribution of Emotional Intelligence scores.

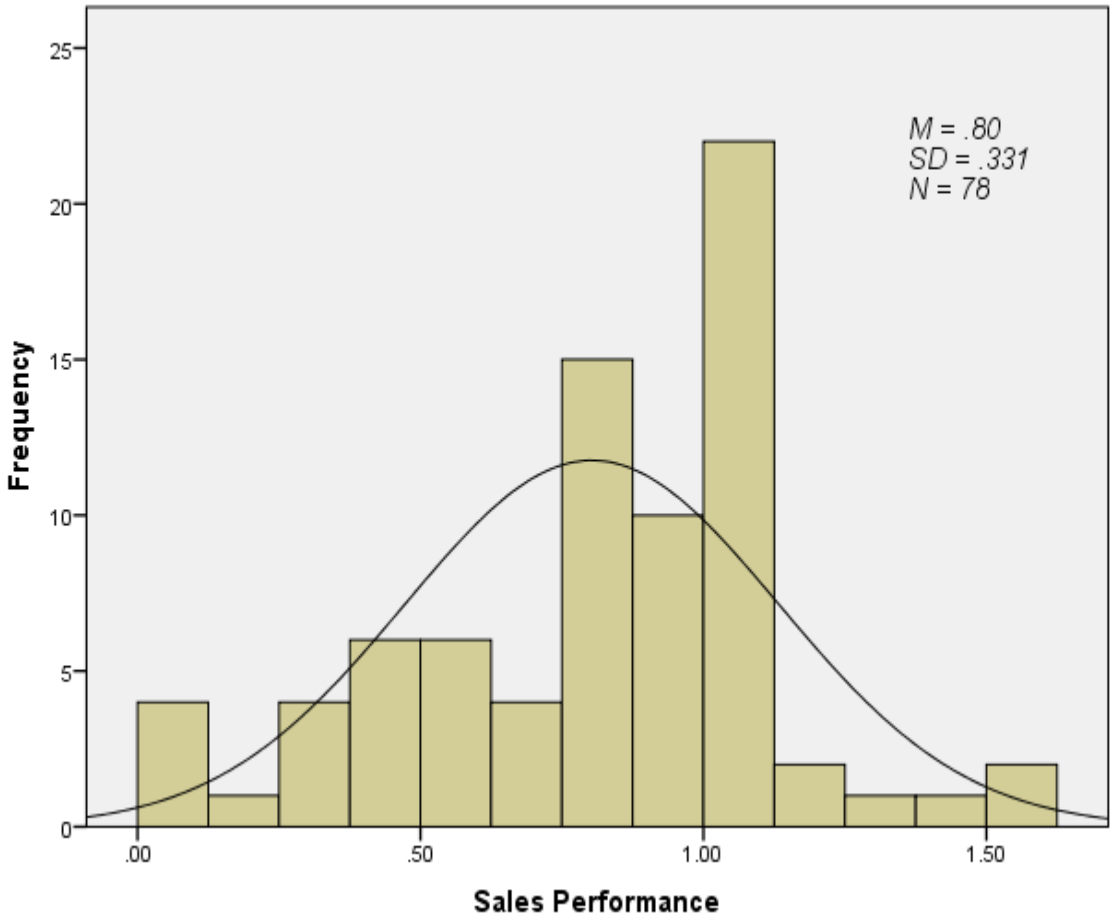

Figure 4. Histogram showing the distribution of sales performance scores.

Skewness is the amount and direction of the curve. Kurtosis is an indication of the height and sharpness of the central peak relative to the shape of a normal curve. Values for both Skewness and Kurtosis should be as close to zero as possible. Skewness and Kurtosis z-values of ±1.96 were acceptable for this study. Another test of data normality, Shapiro-Wilk, was conducted that confirmed normality of data under study. As shown in Table 4, continuous variables were normally distributed.

Table 4

Normality of Continuous Variables

	Skewness			Kurtosis		
Variable	Statistic	*SE*	*z*	Statistic	*SE*	*z*
Emotional Intelligence	-.510	.269	-1.896	-.152	.532	-.286
Self-Perception	.010	.263	.039	-.268	.520	-.516
Self-Expression	-.489	.261	-1.871	-.116	.517	-.224
Interpersonal	-.474	.260	-1.824	-.187	.514	-.364
Decision Making	-.328	.269	-1.219	-.340	.532	-.639
Stress Management	-.438	.264	-1.659	.288	.523	.551
Sales Performance	-.372	.272	-1.368	.250	.538	.465

Note. $N = 86$.

An accurate analysis of inferential statistics requires that assumptions of multicollinearity, linearity, and homoscedasticity are met (Pallant, 2010). Multicollinearity can negatively impact multiple regression analysis if a high degree of correlation between independent variables exists (Pallant, 2010). Cronbach's α is a respected method of estimating reliability (Geldhof, Preacher, & Zephyr, 2013). As reported by MHS, the EQ-i 2.0® scale has good internal consistency, with a Cronbach alpha coefficient of 0.97. In the current study, the Cronbach alpha coefficient was 0.94

showing high reliability among the six independent variables of emotional intelligence scores. Descriptions of the study variables under investigation affirm the decision to use parametric methods such as Pearson's coefficient and multiple linear regression analysis to test for a relationship between emotional intelligence and sales performance.

Inferential Statistics

Based on the combined samples' normal distribution, I selected Pearson's coefficient to test for the strength and direction of a relationship between the variables of emotional intelligence, self-perception, self-expression, interpersonal, decision making, stress management, and sales performance. To accommodate missing values, I excluded cases pairwise. The results of the correlation testing appear in Table 5. An analysis of correlations between the independent and dependent variables showed that there was not a significant relationship between emotional intelligence and sales performance (r = .229, n = 73; p = .052); self-perception and sales performance (r = -.157, n = 77; p = .172); self-expression and sales performance (r = .212, n = 78; p = .062); interpersonal and sales performance (r = .094, n = 78; p = .412); and stress management and sales performance (r = .225, n = 76; p = .051).

A significant association was measured between decision making and sales performance (r = .310, n = 73; p = .008). The positive value of the r coefficient indicated that decision making and sales performance move in the same direction. The higher the decision making score, the higher the sales performance. The coefficient of

determination was calculated (r^2 = .096) making the percent of variance associated with decision making almost 10%.

Table 5

Pearson Correlations Between Measures of Emotional Intelligence and Sales Performance

Variable		1	2	3	4	5	6	7
1. Emotional Intelligence	Pearson Correlation	1	-.822**	.825**	.782**	.724**	.772**	.229
	n	80	80	80	80	79	80	73
2. Self-Perception	Pearson Correlation		1	-.649**	-.647**	-.570**	-.561**	-.157
	n		84	84	84	80	82	77
3. Self-Expression	Pearson Correlation			1	.567**	.547**	.561**	.212
	n			85	85	80	83	78
4. Interpersonal	Pearson Correlation				1	.317**	.542**	.094
	n				80	80	83	78
5. Decision-Making	Pearson Correlation					1	.625**	.310**
	n					80	80	73
6. Stress Management	Pearson Correlation						1	.225
	n						83	76
7. Sales Performance	Pearson Correlation							1
	n							78

Note. **p < 0.01 level (2-tailed).

A standard multiple regression analysis was conducted to evaluate how well emotional intelligence scores predicted sales performance. The six predictor variables were emotional intelligence, self-perception, self-expression, interpersonal, decision making, and stress management. The criterion variable was sales performance expressed

as percent attainment of previous years' revenue objective. Analyses to assess the validity of assumptions regarding multicollinearity, normality, homoscedasticity, outliers, and linearity were completed. Results indicated no serious violations.

By including all six predictor variables, the regression model was not a significant predictor of sales performance, $F(6,66) = 1.295$, $p = .272$. Study sample multiple correlation coefficient was .33. Approximately 11% of the variance in sales performance can be attributed to emotional intelligence and its composite scales. For all six variables, the predictive equation is:

Predicted Sales Performance = -.007(emotional intelligence) + .009(self-perception) + .004(self-expression) + .001(interpersonal) + .012(decision making) + .003(stress management) – .594.

By using just emotional intelligence, the linear regression model was not a significant predictor of sales performance, $F(1,71) = 3.913$, $p = .052$. The sample multiple correlation coefficient was .23. Approximately 5% of the variance in sales performance is attributed to emotional intelligence.

By including only self-perception, the linear regression model was not a significant predictor of sales performance, $F(1,75) = 1.902$, $p = .172$. The sample multiple correlation coefficient was .16. Approximately 3% of the variance in sales performance can be accounted for by self-perception. By including just self-expression, the linear regression model was not a significant predictor of sales performance, $F(1,76) = 3.589$, $p = .062$. The sample multiple correlation coefficient was .21. Approximately

5% of the variance in sales performance can be accounted for by self-expression. By including only interpersonal, the linear regression model was not a significant predictor of sales performance, $F(1,76) = .680$, $p = .412$. The sample multiple correlation coefficient was .94. Approximately 1% of the variance in sales performance is attributed to interpersonal. By including just stress management, the linear regression model was not a significant predictor of sales performance, $F(1,74) = 3.938$, $p = .051$. The sample multiple correlation coefficient was .23. Approximately 5% of the variance in sales performance can be accounted for by stress management.

By using only decision making, the linear regression model was a significant predictor of sales performance, $F(1,71) = 7.550$, $p = .008$. The sample multiple correlation coefficient was .31. Approximately 10% of the variance in sales performance can be accounted for by decision making. The 95% confidence interval for the slope, .003 to .018 does not contain the value of zero. Strength is significantly related to sales performance. For decision making, the predictive equation is:

Predicted Sales Performance = .010(decision making) -.330.

Analysis Summary

The purpose for this study was to examine the relationship between emotional intelligence and sales performance of United States-based sales professionals. Pearson's coefficient and multiple linear regression analysis were used to test for the existence of a relationship between the variables of emotional intelligence, self-perception, self-expression, interpersonal, decision making, stress management, and sales performance.

Assumptions surrounding multiple regression were tested. Results indicated no assumption violations. The correlation results showed there was an association between decision making and sales performance ($r = .310$, $n = 73$; $p < .01$). For all six predictor variables, the regression model was not a significant predictor of sales performance, $F(6,66) = 1.295$, $p = .272$, $R^2 = .105$. By including only decision making, the linear regression model was a significant predictor of sales performance, $F(1,71) = 7.550$, $p < .01$, $R^2 = .096$. The conclusion from this analysis is that decision making holds significance in achieving sales performance.

After analyzing these results, I did not reject this study's first null hypothesis ($H1_0$: There is no statistical relationship between a United States-based technology sales professional's emotional intelligence score and sales performance). I did not reject the second null hypothesis ($H2_0$: There is no statistical relationship between a United States-based technology sales professional's self-perception composite score and sales performance. I did not reject the third null hypothesis ($H3_0$: There was no statistical relationship between a United States-based technology sales professional's self-expression composite score and sales performance).

I did not reject the fourth null hypothesis ($H4_0$: There is no statistical relationship between a United States-based technology sales professional's interpersonal composite score and sales performance). I did reject the fifth null hypothesis ($H5_0$: There is no statistical relationship between a United States-based technology sales professional's decision-making composite score and sales performance). I did not reject the sixth null

hypothesis ($H6_0$: There was no statistical relationship between a United States-based technology sales professional's stress management composite score and sales performance.)

Results of the research confirmed the proposal made by Nadler (2011) that emotional intelligence will positively affect success in a professional environment. This study's results stand in support of Griffin (2013) who found no significant predicative qualities between emotional intelligence and sales performance of pharmaceutical sales managers. Griffin (2013) also found statistical significance within an individual branch of emotional intelligence (understanding emotions) as measured by the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). De La Cruz et al. (2014) found significant correlation between sales performance and emotional intelligence.

The emotional intelligence theory held that I would expect the independent variables (emotional intelligence constructs), measured by the EQ-i 2.0® survey assessment, to influence sales performance outcomes given sales professionals reliance on emotional intelligence qualities. This theory proved to be correct given the positive correlation and predictive qualities between a branch score (decision making) of emotional intelligence and sales performance. The job performance theory held that I would expect the dependent variable (sales performance) to be unique and not generalizable to my anticipated single company sales population sample. As evidenced by the two unique samples, LinkedIn and my company, this also proved to be accurate.

LinkedIn self-reported sales performance was 13 basis points higher than the company reported sales performance.

Applications to Professional Practice

The sales team is an essential element in the business-to-business selling process. For most companies, the salesperson initiates, develops, and nurtures the customer relationship (Kumar et al., 2014). Organizations all over the world spend billions every year in training their sales teams (Little, 2014). Business leaders can overlook the gap between mediocre and high sales performance because productivity exists in both instances (Frino & Desiderio, 2013). This performance gap can make a marked difference to the success of a business and effect the development and income of its salespeople. By understanding the relationship between emotional intelligence and sales performance, this gap may help close between mediocre and high performance.

The purpose of this quantitative correlational research study was to examine the relationship between emotional intelligence and sales performance of United States-based sales professionals. According to the responses received (N = 86), respondents were primarily male and middle-aged. Half of respondents had job classifications in client management, while the other half served in sales management. Technology sales professionals achieved an average of 86% of their annual sales performance target. Results were much lower for the company provided sales performance achievement (77%). The study participants were all United States-based technology sales professionals who struggled to meet sales performance targets.

Findings indicate that emotional intelligence does play a role in sales performance. As measured by the EQ-i 2.0®, there was a significant correlation measured between the emotional intelligence branch of decision making and sales performance. Higher decision-making skill leads to higher sales performance. Decision making also proved to be a significant predictor of sales performance. Approximately 10% of the variance in sales performance can be accounted for by decision making. To gain a competitive advantage, and better organizational outcomes, business leaders can use this information to seek out and hire emotionally intelligent sales professionals. Company leaders can also train existing sales professionals on emotional intelligence competencies to improve company-wide sales performance (Fu, 2015).

Implications for Social Change

The results of this study indicated that the emotional intelligence branch of decision making and sales performance have a significant relationship. This finding is important because it provides business leaders with demonstrable proof of this relationship, allowing them to use this knowledge to promote positive social change by funding programs that promote using emotional intelligence skills in the workplace. Company leaders should use the information in this study to contribute to positive social change by developing and implementing sales training and recruitment programs that promote the well-being of its sales professionals. Effective programs will empower sales professionals skill sets necessary to achieve personal satisfaction and sales performance targets.

Sales professionals could develop and learn to control their emotions more effectively when dealing with customers and their companies. Emotionally intelligent sales professionals may even have a modeling effect on their peers, subordinates, and leadership. These outcomes could lead to lower salesperson turnover, higher sales performance, and greater organization effectiveness. Emotional intelligence may become an integral component of creating and implementing a more holistic employee performance evaluation process (Pearman, 2011). This study provides business leaders with information useful for improving employee and customer interactions in various organizations. This benefit extends beyond the workplace to employees' homes, neighborhoods, and civic organizations.

Recommendations for Action

Business leaders should secure funding to enable programs that promote using emotional intelligence skills by their sales professionals. Human capital teams and hiring managers responsible for recruiting sales professionals should evaluate this study's conclusions to understand what skills are desired for an emotionally intelligent salesforce. Identification of these skillsets should be integrated into a company's hiring process. Many programs exist to augment the hiring process by screening candidates for desired skills.

Human capital teams responsible for training sales professionals should learn about emotional intelligence and its profound effect on sales performance. By understanding desired emotional intelligence skills, sales training programs can be

designed or purchased that incorporate emotional intelligence awareness and training over a sustained period. Because emotional intelligence is a learned skill, I suggest testing sales professionals at regular intervals to assess improvement. Given the significant relationship found between the emotional intelligence branch of decision making and sales performance, there is now evidence to support integration of emotional intelligence into the hiring and training process of sales professionals.

The results of this study should be of interest to both sales and business leaders. Prior to this work, there was an absence of research regarding the relationship between emotional intelligence and sales performance of technology sales professionals. The plan to disseminate the results of this research includes the presentation of results to my company. In order to reach a wider business audience, I intend to submit the results of this work to a scholarly sales management journal.

Recommendations for Further Research

Given that two samples were used in this study (Company and LinkedIn) to meet sample size requirements, my first recommendation would be to avoid that approach. Instead, focus on gaining approval of a sufficiently large enough organization to test their technology sales professionals over an extended period. By testing a single organization over a two or three year period, sales performance data has tradition and meaning because it is wrapped in cultural norms associated with and important to that specific organization's goals and objectives. The limitation to this recommendation is that it may not be generalizable to other sales professionals. As job performance theory holds,

employees do what can be observed and measured relevant to business goals (Blickle et al., 2011).

By testing a single organization over many fiscal years, company provided participant sales performance data would seem to have more credibility. When measuring shorter periods of time, sales performance data may not accurately reflect the participant's contribution to the organization. Given that the data showed participants with higher than average emotional intelligence yet poor sales performance, further research should be pursued to understand why this condition exists. Confounding variables such as market conditions should be considered when evaluating emotional intelligence and sales performance of sales professionals.

Limitations or weaknesses exist in every study (Bernard, 2013). For this study, limitations of time and scope were the culprits. While a quantitative method provided a useful baseline for results, using a mixed-methods would have been more thorough. Correlational studies attempt to correlate one variable to another to determine if a relationship exists. Correlation does not imply causation (Verhulst, Eaves, & Hatemi, 2011). Finally, MHS reports the EQ-i 2.0® instrument is highly regarded as an emotional intelligence assessment tool. Other instruments may exist that might be more advantageous for measuring emotional intelligence such as domain specific assessments.

Reflections

As an employee of the company under study, I was cognizant of the need for anonymity so that bias would be minimized. With my enthusiasm to conduct the study,

and regular interaction with sales and client management, being a silent researcher was a challenge. By performing the study, my relationships with extended company leadership were enhanced. New opportunities presented themselves to provide solutions to improve company-wide sales performance.

By conducting this study, I was forced to consider what I believed about sales performance and emotional intelligence. Believing sales performance was unique to each organization, it was gratifying to see the stark results between Company and LinkedIn samples. I also expected to find a few significant relationships with emotional intelligence branches. That proved to be a false expectation. With only one significant relationship found, I pondered ways for future researchers to improve this study to bring into consideration other variables that might influence sales performance.

Summary and Study Conclusions

For many companies, the salesperson initiates, develops, and nurtures the customer relationship. Business leaders can overlook the gap between mediocre and high sales performance because productivity exists in both instances. This performance gap can make a difference to the success of a business and effect the development and income of its salespeople. By understanding the relationship between emotional intelligence and sales performance, this gap may help close between mediocre and high performance.

Findings from this research study indicate that emotional intelligence does play a role in sales performance. As measured by the EQ-i 2.0®, a significant relationship exists between the emotional intelligence branch of decision making and sales performance.

Higher decision-making skill leads to higher sales performance. Decision making also proved to be a significant predictor of sales performance. Approximately 10% of the variance in sales performance can be accounted for by decision making. To gain a competitive advantage, and better organizational outcomes, business leaders can use this information to seek out and hire emotionally intelligent sales professionals. Company leaders can also train existing sales professionals on emotional intelligence competencies to improve company-wide sales performance.

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Appendix A: Organizational Consent

May 1, 2015

Re: Emotional Intelligence Sales Assessment

Dear Michael Reid:

Based on a review of your doctoral academic research proposal, [redacted] or the "Company") will permit you to seek participation in the study entitled "Sales Performance and Emotional Intelligence of Technology Sales Professionals" from [redacted] employees. As part of this study, the Company authorizes you to work with our Human Capital Group Resource Representative to assist you with the following tasks:

1. Defining emotional intelligence assessment goals, objectives, deliverables, timeline, and costs.
2. Defining eligibility criteria for research study participants, including (a) being at least 18 years old, (b) living in the U.S., (c) working as a technology sales professional, (d) employed by [redacted] and (e) having received a sales performance evaluation for the fiscal year ending March 31, 2015.
3. Defining data to be provided by [redacted] including (a) an anonymous employee reference identification number, (b) a de-identified, anonymous email address, (c) the job family title, (d) the individual's percent attainment to sales target for fiscal year ending March 31, 2015, and (e) the total contract value of sales for fiscal year ending March 31, 2015.
4. Preparing communications to inform the [redacted] sales community before, during, and after emotional intelligence assessment with Company approval.

As a condition to [redacted] involvement in the survey, please note the following:

1. Employee participation in the study will be entirely voluntary and at an employee's sole discretion.
2. Employees may withdraw from the study at any time before completing the assessment. Employees may also withdraw from the study for up to 45 days after completing the assessment by contacting [redacted]. In the event an employee asks to withdraw from the study, [redacted] will require that any information disclosed to you regarding such employee be returned immediately and not used in the study in any manner.

3. All data provided by [redacted] to you will be anonymized to ensure employee confidentiality.
4. All data collected will remain entirely confidential and may not be provided to anyone outside of your supervising faculty and staff without advance written permission from both the Walden University Institutional Review Board and [redacted].

[redacted] will make reasonable efforts to provide you with the following support:

1. Assign a Human Capital Group Representative for you to work with.
2. Meet bi-weekly to prepare sales organization for emotional intelligence assessment.
3. Deliver de-identified, anonymous eligible participant data that has been agreed upon.

Please note that the Company reserves the right to withdraw from the study at any time with or without notice at its sole discretion. [redacted] represents that your research plan, as described herein and further in the Memorandum of Understanding you will be required to execute with the Company, complies with Company policies.

Sincerely,

[redacted]

Appendix B: MHS EQ-i 2.0® Instrument Consent

From: Shawna Ortiz [mailto:shawna.ortiz@MHS.com]
Sent: Wednesday, April 22, 2015 9:32 AM
To: Michael.Reid@waldenu.edu
Subject: Student Research Discount with MHS Products

Hello Michael,

Congratulations! You have been approved for a Student Research Discount on the EQ-I 2.0 for your study entitled 'Sales Performance and Emotional Intelligence of Technology Sales Professionals'. This discount grants you [redacted] off of related product orders over [redacted] (before shipping) as well as access to scored datasets for a fee of [redacted] per administration online. Please call client services at 1.800.456.3003 using the following customer number to place your order: [redacted]. Keep this number on file as you will need it to place future orders with us.

Conditions

1. Your discount expires one year from today. If you require a discount beyond the expiry date please re-apply at that point.
2. Please bear in mind that scored datasets are to be used for the collection of data only and cannot be used to provide feedback to respondents. If you are intending to provide feedback please ensure that you order one of our available reports. Your 30% discount will apply to the report cost.
3. Your research is important to us, as agreed upon in your application please remember to send a report of your results to: researchsummaries@mhs.com following the completion of your study.

Administration Instructions

I will send you instructions via email on how to access the online administration and scoring service. Please be sure to take the online tutorials once you log in.

You will be contacted by our Permissions department with regards to permission to cite no more than six items or [redacted] of the assessment in your dissertation/thesis/report, and with regards to obtaining a sample copy of the assessment.

Thank you, and good luck with your research,

Shawna Ortiz, *Customer Service Representative*
MULTI-HEALTH SYSTEMS INC. (MHS)
In Canada: 1-800-268-6011 Address: 3770 Victoria Park Ave. Toronto, Ont. M2H 3M6
In U.S.: 1-800-456-3003 Address: P.O. Box 950 North Tonawanda, NY 14120-0950
International: 647-557-9732

Fax: 416-492-3343 Toll Free in Canada & U.S.: 1-888-540-4484
Website: www.mhs.com
Please send all US courier deliveries to 60 Industrial Parkway, Suite 706, Cheektowaga, NY, 14227 or our Canadian address.

Appendix C: Walden University IRB Consent

From: IRB [mailto:IRB@waldenu.edu]
Sent: Thursday, May 21, 2015 6:53 PM
To: michael.reid@waldenu.edu
Cc: 'Lynn Szostek'; IRB
Subject: IRB Materials Approved - Michael Reid

Dear Mr. Reid,

This email is to notify you that the Institutional Review Board (IRB) has approved your application for the study entitled, "Sales Performance and Emotional Intelligence of Technology Sales Professionals."

Your approval # is 05-21-15-0244380. You will need to reference this number in your dissertation and in any future funding or publication submissions. Also attached to this e-mail is the IRB approved consent form. Please note, if this is already in an on-line format, you will need to update that consent document to include the IRB approval number and expiration date.

Your IRB approval expires on May 20, 2016. One month before this expiration date, you will be sent a Continuing Review Form, which must be submitted if you wish to collect data beyond the approval expiration date.

Your IRB approval is contingent upon your adherence to the exact procedures described in the final version of the IRB application document that has been submitted as of this date. This includes maintaining your current status with the university. Your IRB approval is only valid while you are an actively enrolled student at Walden University. If you need to take a leave of absence or are otherwise unable to remain actively enrolled, your IRB approval is suspended. Absolutely NO participant recruitment or data collection may occur while a student is not actively enrolled.

If you need to make any changes to your research staff or procedures, you must obtain IRB approval by submitting the IRB Request for Change in Procedures Form. You will receive confirmation with a status update of the request within 1 week of submitting the change request form and are not permitted to implement changes prior to receiving approval. Please note that Walden University does not accept responsibility or liability for research activities conducted without the IRB's approval, and the University will not accept or grant credit for student work that fails to comply with the policies and procedures related to ethical standards in research.

When you submitted your IRB application, you made a commitment to communicate both discrete adverse events and general problems to the IRB within 1 week of their occurrence/realization. Failure to do so may result in invalidation of data, loss of academic credit, and/or loss of legal protections otherwise available to the researcher.

Both the Adverse Event Reporting form and Request for Change in Procedures form can be obtained at the IRB section of the Walden website:
http://academicguides.waldenu.edu/researchcenter/orec

Researchers are expected to keep detailed records of their research activities (i.e., participant log sheets, completed consent forms, etc.) for the same period of time they retain the original data. If, in the future, you require copies of the originally submitted IRB materials, you may request them from Institutional Review Board.

Both students and faculty are invited to provide feedback on this IRB experience at the link below:

http://www.surveymonkey.com/s.aspx?sm=qHBJzkJMUx43pZegKlmdiQ_3d_3d

Sincerely,
Libby Munson
Research Ethics Support Specialist
Office of Research Ethics and Compliance

Office address for Walden University:
100 Washington Avenue South, Suite 900
Minneapolis, MN 55401

Information about the Walden University Institutional Review Board, including instructions for application, may be found at this link:
http://academicguides.waldenu.edu/researchcenter/orec

Appendix D: Announcement to Participants

Emotional Intelligence (EQ) Research Study

Optional Assessment for U.S. Based Sales Community

Dear U.S. Client Managers and Sales Teams,

[redacted] has agreed to assist an employee pursuing a doctoral degree with a voluntary Emotional Intelligence Assessment of our sales community. In connection with this Assessment, sales and client management professionals will be invited to participate in a research study regarding the relationship between emotional intelligence and sales performance.

Background Information:

The purpose of this study is to examine the relationship between emotional intelligence and sales performance of U.S.-based technology sales professionals. Eligible participants must be at least 18 years old, living in the U.S., working as a sales professional employed by [redacted] and having received a sales performance evaluation for the fiscal year ending March 31, 2015. If you opt to participate in this study, you will be invited to spend approximately 30 minutes participating in an anonymous, online emotional intelligence assessment. Upon completion of the assessment, de-identified, anonymized participant results will be combined with recent sales performance and provided to the researcher, who will use a series of statistical analyses to evaluate the strength of correlation.

Voluntary and Confidential Nature of Research:

This research study is entirely voluntary. It is your choice if you want to participate or not. There will be absolutely no consequences from [redacted] if you choose not to participate, which means there will not be any retaliation or any adverse employment actions taken

Participate in an optional, anonymous, and confidential research study regarding the relationship between emotional intelligence (EQ) and sales performance.

Requires no more than 30 minutes of your time

Look for an invitation from noreply@mhs.com.

For questions, please email: [redacted]

against you based on your decision not to participate in the study. If you decide to join the study now, you can change your mind later. You have the right to withdraw at any time by closing the survey link before clicking “submit” and completing the assessment. You also may also withdraw your participation up to 45 days after completing the assessment by contacting your HR Business Partner.

Any information collected will be de-identified by an [redacted] Human Capital project team to ensure anonymity. The researcher is prohibited from knowing any participant information (e.g., name, email address, etc.) that could identify a participant in the study report. All information obtained will be treated as confidential and will be safeguarded by the researcher in accordance with federal and state laws.

Benefits:

[redacted] will receive the results measuring the strength of correlation between emotional intelligence and sales performance of its participating sales workforce. If conclusive, results of this study may contribute to the development of emotional intelligence sales training as well as recruitment programs that consider emotional intelligence factors, which may lead to higher sales performance.

Best regards,

[redacted]

[redacted]

Appendix E: Informed Consent and Invitation

You are invited to take part in a research study regarding the relationship between emotional intelligence and sales performance. The researcher is inviting eligible [redacted]' technology sales professionals to be in the study. The eligibility criteria for research study participants includes (a) being at least 18 years old, (b) living in the U.S., (c) working as a technology sales professional, (d) employed by [redacted], and (e) received a sales performance evaluation for the fiscal year ending March 31, 2015. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

Your reference ID is EQxyz. Please use this ID instead of your name when entering survey site: <lync>

Background Information:
The purpose of this study is to examine the relationship between emotional intelligence and sales performance of U.S.-based sales professionals. The researcher believes the results of this research will foster evidence-based recommendations that may lead to enhanced outcomes for sales organizations and sales professionals.

Procedures:
If you agree to be in this study, you will be asked to spend up to 30 minutes participating in an online emotional intelligence assessment. Beginning now through 11:59pm EST on Friday, June 5, 2015, the assessment site is open.

Completing this assessment will require you to:

- Log into Multi-Health Systems, Inc. web site by clicking on the embedded link in this email.
- Answer 4 optional demographic questions.
- Answer 133 emotional intelligence questions. These questions ask you to rate on a scale how much you agree with a statement.

Voluntary Nature of the Study:
This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at [redacted] will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You have the right to withdraw at any time by closing the survey link before clicking "submit" and completing the assessment. You may also withdraw your participation up to 45 days after completing the assessment by contacting your human resources representative. You may stop at any time.

Risks and Benefits of Being in the Study:
Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue and stress. Being in this study would not pose risk to your safety or wellbeing.

Upon completion, participants may request results of their emotional intelligence assessment by contacting [redacted] Human Capital Group Resource Representative at EQ@[redacted]. Business results of this study are realized through the development of emotional intelligence sales training and recruitment programs that lead to higher sales achievement. By employing new sales professionals with high emotional intelligence, and training existing ones to increase emotional intelligence competency, social implications for sales professionals include improving physical and mental health and quality of relationships.

Payment:
You will not receive any form of payment for participating in this study.

Privacy:
To protect your identity[redacted] has de-identified your personal and contact information. All information provided to the researcher will be kept confidential in accordance with federal and state laws. Data will be secured electronically in the locked office of the researcher. In accordance with Walden University policy, data will be securely archived for a period of at least 5 years.

Contacts and Questions:
You may ask any questions you have now or later by contacting [redacted] Human Capital Group Resource Representative at EQ@[redacted]. If you want to talk privately about your rights as a participant, you can also call Walden University's Research Participant Advocate at 1-800-925-3368 ext. 1210 or email at IRB@waldenu.edu. Walden University's approval number for this study is 05-21-15-0244380 which expires on May 20, 2016. Please print or save this consent form for your records.

Statement of Consent:
I have read the above information and understand the study well enough to make a decision about my involvement. By clicking the link below, I understand that I am agreeing to the terms described above.

Again, your reference ID is EQxyz. Please use this ID instead of your name when entering survey site: <lync>