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Managers' Emotional Intelligence and Employee Turnover Rates in Quick Service

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This is to certify that the doctoral study by

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MBA, Webster University, 2005

BS, Southern Illinois University at Carbondale, 2003

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Turnover rate is a benchmark economic measure and affects the customer service and profitability of organizations. The purpose of this correlational study was to examine the relationship between general managers' emotional intelligence (EI), operations evaluation scores (OE), and employee turnover rates at Brand X quick service restaurant (QSR) companies using Salovey and Mayer's theoretical framework of EI. Data were collected from a sample of 69 QSR general managers, with at least 6 months of experience, in the Southeastern United States using the EQ-i 2.0 self-assessment instrument. The mean employee turnover rate for the sample (M = 161%), was 157% greater than the 2013 average restaurant and accommodation turnover rate and 281.5% greater than the average overall private sector turnover rate for 2013. None of relationships between the predictor variables and the dependent variable in the multiple regression analysis model were statistically significant, at the $p \leq .05$ level. There was no significant relationship between manager's EI, OE scores and employee turnover rates. As a result, HR managers can redirect resources to finding alternate solutions for improving other components of employees' work environment for the subject population. By identifying QSR as one area of elevated employee turnover rate, the results of the study can serve as the basis for catalyzing research and developing findings for identifying alternate solutions to improve employees' health and reduce QSRs employees' work-related stress.

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Dedication

I dedicate this work to Aunt Drusilla and to my wife S. Mechel, children – Simone, Fhallon, Rhyli, and Ghidyyon. Thank you for creating the space in our home and the time in your lives that enabled me to pursue and complete this journey.

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I acknowledge the role of my mother Phyllis Scott and my sister Marcia Scott in my desire to accomplish this achievement. My wife and children remain a source of constant support. Thanks to Dr. Craig Martin (Chair), Dr. Kelly Chermack (SCM), and Dr. Endres (URR) for their critical guidance. Thanks to Dr. Zin and Dr. Latta who were always available to answer my questions. Alysha Liebregts provided unconditional support with assessment instrument, and thanks to my classmates for their encouragement.

I also acknowledge the role of my professional peers who made it possible for me to access the necessary information and who invested their time in providing the required data to make the research possible. The most important acknowledgment is to my Creator, who gave me a sensitive heart and the courage to pursue my dream.

Table of Contents

List of Tables

List of Figures

Section 1: Foundation of the Study

In 2012, food service companies in the United States employed approximately 8.7 million people (National Institute for Occupational Health and Safety [NIOSH], 2015). The U.S. foodservice companies experienced a turnover rate of 62.58% in 2013 (U.S. Department of Labor, 2014a). According to the U.S. Bureau of Labor and Statistics (2015), approximately 2.5 million (or 26.1%) of the food industry employees work in restaurants, with approximately 7% in managerial roles. Emotional intelligence (EI) is a learnable skill that managers use to interpret and manage interpersonal relationships and to make important workplace decisions (Bar-On, 2010; Goleman, 1995; Salovey & Mayer, 1990). Understanding the possible relationship between EI and turnover rate in a quick service restaurant (QSR) environment provides restaurant managers and human resources decision-makers with the opportunity for improving service quality, customer satisfaction, and increasing overall QSR unit financial performance (Mathe & Scott-Halsell, 2012; Teng & Chang, 2013).

Background of the Problem

Although the QSR industry as a whole is one of the largest in the U.S. economy, it is comprised mostly of small businesses. U.S. food service companies supplied $594 billion of the $1.24 trillion in food sold in the United States in 2010 (U.S. Department of Agriculture, n.d.). These food service companies employed approximately 9.6 million workers (NIOSH, 2012) in 425,000 food service firms (U.S. Census Bureau, 2012). According to the U.S. Census Bureau (2012), 80% of the food service companies have fewer than 20 employees, and they face health and safety issues including workplace

violence, elevated homicide risks, excess workload, inadequate rest periods, and prolonged periods of standing, and a resulting high turnover rate.

The high employee turnover rate in the U.S. food industry is indicative of economic and industry-level challenges that have far-reaching effects. According to Hancock, Allen, Bosco, McDaniel, and Pierce (2013), the turnover rate is a benchmark variable in the calculation of labor productivity and customer service. Organizations with high turnover rate experience lower productivity than businesses with low turnover rates. The employee turnover rate in food service and accommodation industry in 2014 was 49.3% higher than the overall private sector turnover rate of 44.4% (U.S. Department of Labor, 2016). According to the U.S. Department of Labor (2016), the advanced estimate for seasonally adjusted labor turnover survey for private industries during December 2015 was 4,716,000. Consequently, high-turnover rates within the restaurant and accommodation industry result in loss of profit for employers and create economic challenges for the U. S. economy. Managers affect the turnover intentions of employees, and the leaders' emotional and social characteristics influence the social and profession successes they achieve in the workplace (Killian, 2012). Therefore, understanding the factors affecting turnover in the foodservice industry is a necessary first step towards finding a solution to reducing turnover rates, increasing the profitability of foodservice companies, and strengthening the national economy. Lowering employee turnover rates will reduce unemployment claims and the economic strain to the national economy.

Problem Statement

In December 2015, 18.11% of private industry employee turnover occurred in accommodation and food services companies (U.S. Department of Labor, 2016). Foodservice and accommodations industry employees' turnover rate in 2013 was 48.34% higher than the overall turnover rate for private sector companies with a recorded separation of approximately 3.2 million workers (U.S. Department of Labor, 2014a). Managers with low EI skills induce employees' job dissatisfaction and increase turnover rates (Grant, 2012). The general business problem is that some leaders and human resources (HR) decision-makers in the food service industry and accommodation industry do not understand the relationship between the managers' EI and employee turnover rates in their companies. The specific business problem is that some QSR managers' lack an understanding of the relationship between general managers' (GM) EI, Operational Evaluation (OE) scores, and employee turnover rates.

Purpose Statement

The purpose of this quantitative correlation study was the examination of the possible relationship between the GM's EI, OE scores, and the employee turnover rate at restaurants from holding companies at Brand X QSR. The holding companies operate approximately 83 restaurants within the Southeastern U.S. market. The independent variables were GMs' EI and OE scores. The dependent variable was service employees' turnover rate. I examined the variables to determine whether there was significant relationship between GMs' EI, OE scores, and employee turnover rates at Brand X QSR (Kleinbaum, Kupper, Nizam, & Rosenberg, 2013). High employee turnover rates deplete

the financial resources of companies (Mathe, Scott-Halsell, & Roseman, 2013; Park & Shaw, 2013); affect the welfare costs in communities, and displace workers who struggle to find gainful employment (Kuminoff, Schoellman, & Timmins, 2015).

Nature of the Study

The objective of quantitative research is the identification and numerical labeling of data thereby enabling constructing statistical models of explanation for the observations (McCusker & Gunaydin, 2015). Whenever researchers seek to understand experiences and attitudes of research participants and their perceptions of a particular phenomenon, using qualitative research methodology can satisfy the objective. Another research approach is the mixed-method. However, combining quantitative and qualitative processes can be time-consuming and expensive (McCusker & Gunaydin, 2015) and was beyond the scope of the current research. Therefore, qualitative and mixed-method designs were unsuitable for the present study.

Correlational studies are suitable for the analyses of variables that are numerically quantifiable (Rovai, Baker, & Ponton, 2013). GMs' EI, OE scores, and employee turnover rates are numerical data. According to Merter and Vannatta (2013), studies involving quantitative variables and examination of relationships without inferring causation are suitable for correlation designs. Therefore, the current study was ideal for a correlation design. Researchers use experimental and quasi-experimental studies to assess cause and effect relationships between independent and dependent variables in studies involving random groups and nonrandom groups respectively (Campbell & Stanley,

2015). Therefore, experimental and quasi-experimental designs were not suitable for the present study.

Research Question

The central research questions for this study was: What is the relationship between general managers' emotional intelligence, operational evaluation scores, and employee turnover rates in quick service restaurants?

The following research sub questions aligned with each hypothesis:

RQ1: What is the relationship between general managers' EI and employee turnover rates in quick service restaurants?

RQ2: What is the relationship between OE scores and employee turnover rates in quick service restaurants?

Hypotheses

The following hypotheses provided a framework for the study and enabled the answering of the research question.

H_0: There is no significant correlation between general managers' EI, OE scores, and employee turnover rates in QSRs.

H_a: There is a significant correlation between general managers' EI, OE scores, and employee turnover rates in QSRs.

Theoretical Framework

The EI theory of Salovey and Mayer's (1990) served as the theoretical underpinning of the study. Salovey and Mayer's EI concept evolved from Thorndike's (1920) theory of social intelligence. According to Mayer, Salovey, and Caruso (2004),

the development of EI concept involved an understanding of multiple specific intelligence ideas (Gardner, 1983; Sternberg, 1985; Weschler, 1950).

Thorndike (1920) argued that the social intelligence represents an independent and measurable skill set that is quantifiable and distinct from mechanical intelligence or abstract intelligence. According to Thorndike (1920), managers and leaders possessing high mechanical and or abstract intelligence without above average social intelligence would be unsuccessful in their professional pursuit. Building on the theoretical base of Thorndike's concept, Salovey and Mayer (1990) introduced the theory of EI. According to Salovey and Mayer (1990), EI as a subset of social intelligence represents a person's ability to recognize, understand, and monitor personal and other people's emotion and feelings, and influence actions based on this knowledge. Mayer, Salovey, and Caruso developed the ability emotional intelligence test (MSCEIT) to measure two broad components of EI. The components are *experiential intelligence* and *strategic intelligence*. These components of intelligence consist of four sublevel branch scores for perception, facilitation, understanding, and managing emotions (Brackett & Mayer, 2003).

In this study, I examined the relationship between QSR GMs' EI, OE scores and employee turnover rates to determine whether a correlation existed among these variables. Communication is an important factor in organizational success (Rucker & Welch, 2012), and the quality of interpersonal interaction is dependent on the emotional skill of the leaders (Killian, 2012). The requisite emotional skills for self-management and social management are learnable and testable (Salovey & Mayer, 1990). In addition,

leaders who possess the emotional skills for self- and social- management can predict employees' emotional response to organizational rules, ability to cope, and job satisfaction (Lee & Ok, 2012). It is important to understand the correlations between QSR GMs' EI, OE, and turnover rates (Meisler, 2013).

The emotional skills of leaders and managers are important in effecting communicating across organizational levels and in creating successful professional and social relationships (Killian, 2012). Rucker and Welch (2012) argued that effective communication is an important component in organizational success. EI skills are measurements of interpersonal relatability and account for approximately 48% of managers' ability to adapt and manage interpersonal relationships (Prentice & King, 2013). Consequently, understanding the possible correlation between GM's EI, OE scores, and turnover rates can be an important component for reducing the turnover rates.

Operational Definitions

Below are conceptual and operational definitions to delineate the use of key terms in context of the study:

Assimilating emotions: Assimilating emotions are the ability to integrate emotions into perceptual and cognitive processes (Mayer, Salovey, Caruso, & Sitarenios, 2001).

Emotion: Emotion is the systematic responses to stimuli within a person's biotic systems, which includes biological, cognitive, motivational, and experiential-systems, and psychosomatic subsystems (Salovey & Mayer, 2000).

Emotional intelligence (EI): EI is a learnable skill and a component of social intelligence that enable a person to monitor, understand, and respond appropriately to emotional cues in self and others (Salovey & Mayer, 2000).

Intelligence: Intelligence is the full or overall capacity of an individual to function with deliberate and reasoned actions and thoughts as he or she interacts with the environment (Wechsler, 1958).

Managing emotions: Managing emotions is the ability to control emotions (Mayer, Salovey, Caruso, & Sitarenios, 2001).

Perceiving emotions: Perceiving emotions is the ability to recognize and identify the emotional content of different stimuli (Mayer, Salovey, Caruso, & Sitarenios, 2001)

Social intelligence: Social intelligence is the individual ability to recognize emotional cues, motives, and behaviors in self and others and to make decisions based on that information (Thorndike, 1920).

Turnover: Turnover is the voluntary and involuntary separation of employees from organizations (U.S. Department of Labor, n.d.).

Turnover rate: Turnover rate is the ratio that measures the annual number of employees separated from an establishment as a percent of the number of active employees at the end of the final pay period within the 12-month cycle (U.S. Department of Labor, n.d.).

Understanding emotions: Understanding emotions is the ability to reason about and interpret the meaning of emotions (Mayer, Salovey, Caruso, & Sitarenios, 2001).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are untested beliefs, ideas, and statements that researchers take for granted and use to shape the research (Kirkwood & Price, 2013). Assumptions provide researchers with the framework and perspective that influence the epistemological considerations, research process, and for establishing guidelines to protect against biases in their studies (Bryman & Bell, 2015). I examined the variables to identify the possible relationships between QSR GMs' EI, OE scores, and employee turnover rate in QSRs. One assumption that I made was that the purposive sample is representative of the larger population (Teddlie & Yu, 2007) of managers at the company and Brand X.

The second assumption was that all participants responded to the questions in the survey instrument with honesty and integrity. The third assumption was the OE and turnover data from the organizations were accurate. Section 2 will include a discussion of the statistical assumptions related to correlational studies.

Limitations

Limitations identify risks that are not within the control of the researcher such as participants' biases, inconsistencies in performance, observations, or results, and indirect conclusions regarding evidence (Guyatt et al., 2008). The context of the study includes inherent limitations while researchers define additional limitations as a framework for research (Kirkwood & Price, 2013). Possible limitations enable readers to assess the quality of the research by identifying the researcher's intentions, procedures, lens, and the paradigm for the construction of the study (Shipman, 2014). According to Shipman

(2014), the identification of limitations in research allows future researchers to understand the perspective of the earlier work and how the findings might be useful in future studies. Therefore, identifying limitations in the current study will ensure that future researchers can develop a critical understanding of the research (Connelly, 2013) and have an objective basis for choosing whether to use the findings in future research.

The participants for the study are from specific companies and may have included limitations relating to the particular population including organizational culture and company related hiring practices and procedures. The results of the EI assessments may include the weaknesses that are inherent in the assessment instrument. The OE scores may reflect evaluator's biases. I did not control for organizational culture, the gender of participants, the level of education, and physical work environments, which are possible moderating variables within the context of the research.

Finally, the use of EQ-i 2.0 online self-rating instrument to collect EI data may have included participants' biases (Fiore & Antonakis, 2011). The examination of the relationships among the variables warranted the use of correlational design. However, the identification of relationships among variables does not imply causation (Singleton & Strait, 2010). The purposive sampling method of the current study limits the generalizability of the conclusions to the broader QSR population without further studies.

Delimitations

Delimitations identify the boundaries of the research (Simon & Goes, 2013). The scope of the current quantitative correlational study included using a self-administered Internet assessment instrument (EQ-i 2.0) to evaluate the overarching EI score of QSR

managers at three companies that operate Brand X QSR. A delimitation of the study is only current restaurant GMs with a minimum of 6-months, as GM at a unit business unit within the organization will receive invitations to participate in the Internet survey. A further delimitation is that I examined the overarching EI scores and not the individual EI subscales that are associated with the EQ-i 2.0 instrument. In addition, the participants provided EI data by completing self-assessments and the results included no data about employees' perceptions of their managers' EI.

Significance of the Study

Contribution to Business Practice

Leaders promote organizational success by being able to understand and manage the critical resources of their companies and their ability to develop, design, and implement solutions to the problems (Joseph et al., 2014). According to Mathe and Scott-Halsell (2012), the high turnover rate within QSR industry reduces employers' access to skilled service personnel and limits the capacity to produce positive results. Service personnel are important in brand differentiation strategies and QSRs' ability to deliver excellent service and products and maintain above average performance (Dong, Seo, & Bartol, 2014).

Building sustainable customer relationships may depend on the leader's ability to retain competent employees. Therefore, the leaders' knowledge of the possible correlation between the manager's EI and employees' job satisfaction may provide a strategic advantage in the struggle to reduce turnover rates (Mathe & Scott-Halsell,

2012). Hancock, Allen, Bosco, McDaniel, and Pierce (2013) argued that reducing turnover rates improves organizational effectiveness and profitability.

Implications for Social Change

The social implications of this study are the potential benefits that the community can gain from the reduction in unemployment and the lessening stress to economic and social safety net such as unemployment benefits and supplemental housing and food services (see Kuminoff, Schoellman, & Timmins, 2015). According to Rafiee, Kazemi, and Alimiri (2013), improving job satisfaction and reducing turnover may improve employees' professional and social health because of reduction in work-related stress.

A Review of the Professional and Academic Literature

This literature review is a critical analysis of synthesized ideas pertaining to the influence of EI theories regarding management and leadership, organizational culture, job satisfaction, and turnover rate. The seminal EI works of Caruso, Mayer, and Salovey, (2001); Mayer, Caruso, and Salovey, (1999); Mayer, Salovey, and Caruso, (2008); and Salovey and Mayer, (1990) are the foundation for the examination of extant EI literature including works by Goleman (1995, 1998, 2002, & 2006) and Bar-On (2010). The discussion of peer-reviewed journal articles and professional and academic publications provides a substantive basis for using the quantitative correlational study to examine the possible relationship between the EI of GM, OE score, and the turnover rates within QSRs.

Strategy for Searching the Literature

The studies that I discuss in this review include 118 publications, 88% with dates between 2012 and 2016, and 93% that are peer reviewed. The sources of the literature are academic resources including Emerald Management Journals, SAGE Full-Text Journals, Business Source Complete, PsycInfo, books by seminal EI authors, and ABI/INFORM Complete databases. I used Google Scholar linked to Walden University Library and a local college library to access primary sources such as books, peer-reviewed journal articles, dissertations, professional websites, and government publications. Sources and material were located using the following keywords in the search: *emotional intelligence, leadership competencies, management in the hospitality industry, quick service restaurant, turnover rate,* and *leadership and turnover*. The search included variations on both search terms and combinations of search terms. The organization of the literature review follows the following format: EI theories, leadership and organizational culture, organizational culture and job satisfaction, job satisfaction and turnover, and EI assessment instruments.

Testing the following hypotheses enabled me to answer the research question.

H_0: There is no significant correlation between general managers' EI, OE scores, and employee turnover rates in QSRs.

H_a: There is a significant correlation between general managers' EI, OE scores, and employee turnover rates in QSRs.

Conceptual Framework Discussion

The relationship between EI theories, job performance, and decision-making continues to attract attention (Parker, Keefer, & Wood, 2011; Perera & DiGiacomo, 2013). Researchers have varying opinions about the role of leadership in organizational development. Leadership style, managers' support for followers, and empoyees' involvement in the decision-making process influence the quality and type of corporate culture (Cohen & Abedallah, 2015; Goleman, 2011; Goleman, Boyatzis, & McKee, 2002). Access to development and empowerment influences employee-organization commitment (Ackfeldt & Malhotra, 2013) and supervisor-employee relationship is a component of organizational culture (Gregory, Osmonbekov, Gregory, Albritton, & Carr, 2013). Therefore, understanding the relationship between EI and operational performance, and turnover experience is important for managers and organization leaders.

Managers influence the employees' perceptions of job satisfaction and their turnover intentions. Employees derive job satisfaction from leadership qualities and skills (Nielsen & Daniels, 2012) and congruence between managers' behavior and organizational culture (Vandenberghe, Bentein, & Panaccio, 2014). Employees' perception of job satisfaction relates to the quality of interpersonal workplace relationships (Dong, Seo, & Bartol, 2014; Mathe, Scott-Halsell, & Roseman, 2013). According to (Dong et al., 2014), employees' affective experience is a critical component of job satisfaction and turnover intention. Consequently, employee turnover is a complex issue (Hancock et al., 2013). The current study may provide leaders, managers, and HR

professionals with a broader understanding of the EI factors potentially affecting managers' ability to solve the complex turnover-related challenges in the QSR industry.

The literature review includes an exploration of EI theories about leadership, organizational culture, job satisfaction, and turnover. In the first heading, I focused on the historical perspective and evolution of EI school of thought from Thorndyke's (1920) social intelligence theory to Salovey and Mayer (1990), Goleman (1995), and Bar-On's (2010) EI theories. In the second heading, I addressed the theoretical relationships between EI and leadership and leadership role in the development of organizational culture. The third heading includes the exploration of the role of organizational culture in employees' perception of job satisfaction and the impact on turnover. In the final section, I addressed the use of EI assessment instruments in previous studies and the relationship between prior empirical research and the current quantitative correlational study. Figure 1 is a graphical representation of the studies and topics outline of the literature review.

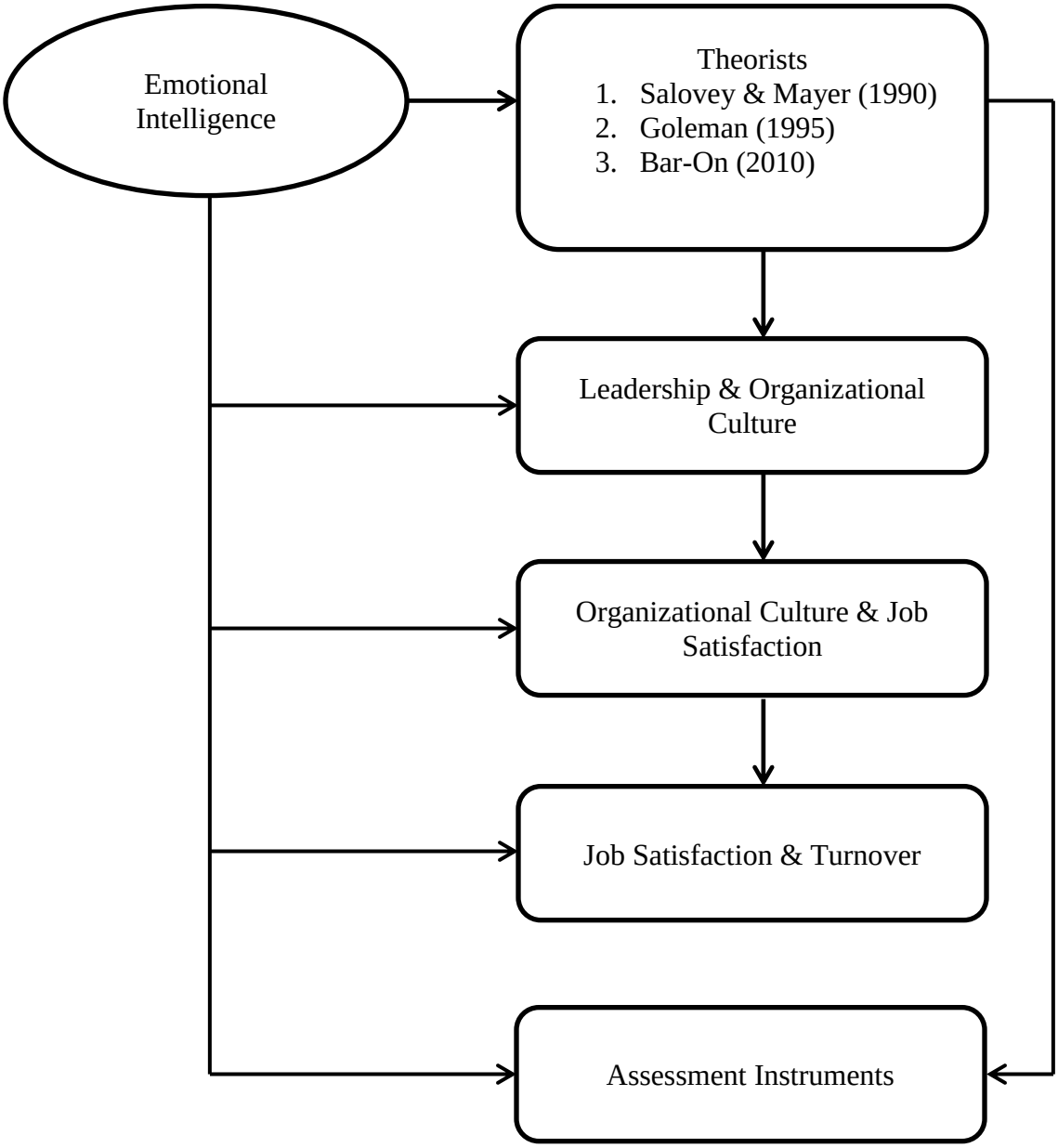


Figure 1. Graphical representation of the studies that inform the literature review.

Salovey and Mayer EI model. Among scholars (e.g., Gardner, 2011; Sternberg, 1985; Thorndike, 1920; Weschler, 1958), the debate about human intelligence, effective measurements, and the nature of success and leadership have produced ideas about the learnability and hereditary nature of leaders. Salovey and Mayer (1990) provided the framework and arguments for the EI concept. The authors argued that EI is a learnable and measurable skill that enables individuals to recognize, interpret, understand, and express emotion in oneself and others (Salovey & Mayer, 1990). According to Salovey and Mayer, using EI skills efficiently and effectively is a source of personal motivation and improvement in the accomplishment of social interactions and professional achievements. Salovey and Mayer explained that first-century concept of emotions as disorganized thoughts and the loss of intellectual control contradicts modern ideas of emotions as motivating factors in adaptive cognitive decision-making. According to Salovey and Mayer, emotions are innate responses to stimuli that produce responses across psychological, physiological, experiential, cognitive, and motivational systems and subsystems within an individual.

Salovey and Mayer (1990) integrated Weschler's (1958) concept of intelligence with Thorndike's (1920) concept of social intelligence into the development of the EI theory. Weschler defined intelligence as a person's collective capacity that enables him/her to coherently think and respond to stimuli within the environment. Thorndike argued that social intelligence represents a distinct set of skills and is necessary for understanding self and others, and in the effective leadership of people. For this reason, intelligence within the Salovey and Mayer EI framework is by definition a separate

capability similar to abstract and mechanical intelligence. Salovey and Mayer defined EI as the underlying component of social intelligence that enables the self-monitoring of emotions, the monitoring of emotions in others, and then to choose responses to the emotional cues. According to Mayer and Salovey (1997), EI competence includes interpersonal, and intrapersonal skills expanded to include a four-branch model.

Mayer, Caruso, and Salovey (1999) defined the four-branch model of EI as perceiving emotion, assimilating emotions, understanding emotions, and managing emotions. Salovey and Mayer (1990) argued that the emotionally intelligent people maintain awareness of their feelings and the feelings of others. In addition, an EI competent person will use this information in decision-making to promote the general welfare and satisfactory interpersonal relationships (Salovey & Mayer, 1990). Conversely, low EI competence may result in unhealthy personal and interpersonal actions ranging from uncontrollable mood swings to sociopathic and alienating behaviors.

Goleman EI model. Goleman (1995) organized the Salovey and Mayer's (1990) model of EI into four clusters with sublevel skills and popularized the concept. According to Goleman's model of EI, the concept is viewable in two separate and interrelated segments. The two segments are intrapersonal skills and interpersonal skills. The intrapersonal component includes self-awareness and self-management (Goleman, 1995). The interpersonal component includes social awareness and relationship management (Goleman). Goleman (2006) argued that EI abilities are important in management and making leadership decisions. Researchers in EI studies consistently demonstrate the

inherent validity of the relationship between EI and job performance (Goleman, Boyatzis, & Mckee, 2002). Conversely, researchers have found that less than 8% of leadership success results from cognitive intelligence (Cherniss, Extein, Goleman, & Weissberg, 2006) and intuitive decision-making reinforces EI skills (Locander, Mulki, & Weinberg, 2014). Goleman's model of EI is consistent with the Salovey and Mayer's model and used the earlier work as the basis to construct the leadership application of the Goleman's EI concept.

Goleman (1998) argued that managers possessing high social awareness and relationship management skills are adept at customer service and managing conflicts. An important component of Goleman's argument is the idea that EI skills are learnable. Goleman's argument about EI as a learnable skill is consistent with Mayer and Salovey's ideas. According to Goleman, EI skills are job-related skills that enhance self-management, a foundational requirement in the mastery of relationship management. In Goleman's framework of emotional competencies, there are four domains and twenty competencies.

Within the Goleman's (1998) EI model, the domains are self-awareness, self-management, social awareness, and relationship management. Self-awareness and self-management are personal abilities while social awareness and relationship management are social abilities. Self-awareness includes emotional self-awareness, accurate self-assessment, and self-confidence. The sublevels in self-management are self-control, trustworthiness, conscientiousness, adaptability, achievement drive, and initiative. The sublevels in social awareness are empathy, service orientation, and organizational

awareness. In the relationship management domain, the sublevels are developing others, influence, communication, conflict management, leadership, change catalyst, building bonds, and teamwork and collaboration. According to Goleman, while the EI constructs are independently measurable skills with identifiable outcomes, examining them in their clusters is more efficient, and together they enable better performance in individuals.

Bar-On EI model. Bar-On's (2010) model of EI, described the EI as including a group of interrelated emotional and social skills that produce intelligent behavior. According to Bar-On, the theories and practices in EI and positive psychology overlap in multiple areas. The conceptual overlaps are evident in Darwin's 1872/1965 work on the role of emotional expression, Maslow's 1950 studies in self-actualization, and in Mayer and Salovey's (1990) and Goleman's (1995) EI related studies. Bar-On's model of EI reflects the link between the inherent humanistic psychology concepts of optimal adaption, and EI focus on emotional awareness and emotional expressions (Bar-On, 2006).

Bar-On (2010) proffered that the first area of priority in positive psychology studies addresses self-regard and self-acceptance, in EI terms this translates to self-awareness. The second area is the ability to understand the feelings of others representing social awareness and empathy in EI terms. The third area of concentration is the capacity for interpersonal interactions, which translates, to social competence in EI terms. Bar-On emphasizes compassion, responsibility, cooperation, and teamwork in the final area of positive psychology. In EI terms, the area of priority represents emotional self-control.

According to Bar-On, EI competencies influence human performance, emotional and psychological health, and transcendental search for purpose.

Bar-On (2010) concluded that there is a significant relationship between EI and academic performance with correlation coefficients ranging from .41 to .45. In addition, the results of the study identified EI as influencing the ability to manage emotions and stress, clarify perspectives, solve interpersonal and intrapersonal problems, and drive motivation. Bar-On argued that EI correlate with occupational performance in multiple studies with predictive validity coefficients of .55 (Bar-On, 2006) and .22 and .46 (Brackett & Salovey, 2004). Using a sample of 51,623 participants from Multi-Health System (MHS), Bar-On (2010) examined the relationship between happiness using the Bar-On EQ-i Happiness scale and EI using the Bar-On EQ-i. Based on the results of the study, Bar-On concluded that there are strong associations between the concepts with demonstrated correlation of .78 revealing a 60% overlap between the happiness domains in EI and positive psychology.

According to Bar-On (2006), EI skills improve the sense of personal well-being, promotes self-awareness, accurate and positive self-regard, self-actualization, and efficient reality testing. In addition, personal performance, happiness, well-being, and the pursuit of a meaningful life are critical areas of concern in positive psychology, and they have demonstrable relationships in EI competency areas. Bar-On's (2010) EI model lists the following six factors that demonstrate concept overlaps: self-awareness, positive social interaction, emotional management, and control, effective problem solving and

decision-making, self-determination, and optimism. Trait EI as defined by the Bar-On model improves managers' ability to learn valuable social skills (Poulou, 2014).

EI skill has broad implications in many areas of social and professional life. Tabatabaei, Jashani, Mataji, and Afsar (2013) measured EI using the Bar-On Inventory that included 5-scales and 15-subscales. Self-efficacy inventory produced a Cronbach alpha of 0.86. The results of the study identified a significant and positive relationship between emotional intelligence and self-efficacy ($r = 0.78$). The authors concluded that EI was predictable by age, sex, education, marital status, payment, and self-efficacy. Goleman's (1995) EI theory builds on the tenets of the Salovey and Mayer's (1990) EI model. Resurrección, Salguero, and Ruiz-Aranda (2014) completed an analysis of 32 EI studies and concluded that EI produced strong evidence of the association between EI, lower psychological maladjustment, and better psychological health in adults.

According to Bar-On (2010), the *Encyclopedia of Applied Psychology* lists Mayer and Salovey (1997), Goleman (1998), and Bar-On (1997) EI models as the three significant schools in EI studies. However, the Mayer and Salovey 1990 EI model provided the functional premise that undergirds both Goleman and Bar-On's models of EI. Mayer and Salovey defined the concept of EI and Goleman promoted the application of the idea as it relates to organizational development and performance. Bar-On interpreted EI as it applied to theories of psychological health and theories of personality. Goleman's application of EI to organizational development and performance provides the stimulus for the current research and exploration in the specific applicability of the Bar-On EI concept to leadership impact on turnover rate in QSR industry.

Leadership and Organizational Culture

Effective communication is integral to achieving successful outcomes in interpersonal relationships and organizational success. Human processing of emotional expression is as distinct as the use of verbal language and is just as important for building relationships (Mayer, Salovey, & Caruso, 2004). Therefore, managers who develop the ability to understand and manage their emotional expression, improve their relationship building skills. Du Plessis, Wakelin, and Nel (2015) concluded that there was a significant relationship between managers' EI and the level of trust from their followers. The quality of interpersonal relationships and the degree of trust that exist in the leader-follower relationships affect overall organizational culture (Zyphur, Zammuto, & Zhang, 2016).

Trust is a *mediating* variable in the employee-manager relationship and affects employee turnover intention (Marzucco, Marique, Stinglhamber, De Roeck, & Hansez, 2014). Managers' EI skills help them to understand and navigate the complexities of creating organizational cultures and influencing employees' workplace behavior. Mayer et al. (2004) argued that EI is a valid predictor of academic performance, deviant behavior, prosocial and other positive behaviors, and leadership and organizational behavior. Identifying relationships between a manager's EI competence and employee turnover rate provides leaders with specific resources for helping to solve a major organizational issue. According to Mayer et al., individuals with high EI competencies are effective at perceiving internal and external emotional cues, and able to use emotions in thoughts, communications, and solving problems. Conversely, low EI individuals are

more likely to engage in behaviors that are problematic and self-destructive. Decision-makers, who are self-aware and competent in EI competencies, have the advantage of leveraging the behaviors of others in the decision-making process to improve both the outcome and process of decision-making (Hess & Bacigalupo, 2011; Sheldon, Dunning, & Ames, 2014).

Managers influence employees' behaviors and by default, have the potential to influence turnover rates in their organizations. EI is important in social and interpersonal interaction in hospitality industry workers because emotional labor is important in customer interactions (Jung & Yoon, 2014). In addition, EI has a significant impact on human performance and influences emotional well-being (Bar-On, 2010). EI influence people's perception of emotion, use of emotion to facilitate thought, understanding, and analyzing emotion, and the reflective regulation of emotions (Brackett, Rivers, & Salovey, 2011; Perreault, Mask, Morgan, & Blanchard, 2014). Consequently, EI skills are important in the managerial and leadership toolkit (Azouzi & Jarboui, 2013).

Compared to the theories of mechanical and abstract intelligence, EI is a relatively new idea. Hutchinson and Hurley (2013) argued that EI theories are open to challenges because the science is new. However, they argued that leaders should develop EI skills to combat workplace issues such as bullying. According to Laschinger and Fida (2013), employees who experience bullying have higher turnover intentions than employees who experience no workplace bullying. Linking EI skills to the management of lateral workplace violence is indirectly linking EI to the management of turnover intention and turnover rate. Even though it is arguable that the absence of long-term

science limits the understanding of EI, the measurable benefits outweigh the negative perceptions regarding EI tendency to promote conformity (Hutchison & Hurley, 2013).

EI is an important managerial skill because it helps managers to define roles and objectives in the workplace. Coetzee and Harry (2014) examined the relationship between EI and career adaptability by linking Salovey and Mayer's (1990) model with Savikas and Perfeli's (2012) concept of career adaptability in a study with $N = 409$ early career black call center agents. Using cross-sectional surveys, Coetzee and Harry measured the relationship between EI skills and career adaptability. Based on the results of the study, Coetzee and Harry concluded that EI is an effective predictor of the four domains of career adaptability. The domains definition includes career- concern, control, confidence, and curiosity.

Managers are responsible for communicating across multiple levels in organizations and understanding the role of interpersonal relationships in promoting organizational objectives. Planning, leading, and communicating are core functions of leaders and managers (Drescher, Korsgaard, Welpe, Picot, & Wigand, 2014). According to Coetzee and Harry (2014), the management of emotions contributes the most in the explanations linking EI to career adaptability. In addition, the development of EI skills is important in improving professional career adaptability and decision-making, occupational exploration, and overall professional drive. Based on the results of the study, Coetzee and Harry concluded that EI was a significant predictor of planning and goal-setting ability.

Emotionally competent managers can be objective when dealing with interpersonal relationship issues in the workplace. Marzucco, Marique, Stinglhamber, De Roeck, and Hansez (2014) concluded that the unbias treatment of employees is an important function of managers because employees' attitudes (job satisfaction, turnover intentions, and organizational commitment) are important in organizational success. Piaw et al. (2014) concluded that multiple intelligence abilities helped the individuals to be effective leaders, managers, and to achieve leadership goals while Boyatzis, Good, and Massa (2012) concluded that emotional and social intelligence (ESI) is a significant predictor of the leader's performance.

Generalized intelligence does not predict the performance of leaders because there is a gap in conceptualizing, understanding, and measuring such constructs science (Mayer, 2014). Therefore, there is the need to explore the role of EI in successful management. Understanding the relationship between EI and turnover rate is an obvious starting point. EI contributes to the effectiveness of leaders in developing organizational culture (Walter, Cole, & Humphrey, 2011; Walter & Scheibe, 2013). Organizational culture is important in service industries such as QSR where the majority of activities are interpersonal and relational oriented.

Walter, Cole, and Humphrey (2011) evaluated the performances of leaders in different organizations within the context of EI theories. According to Walter et al., managers with high EI competence were more effective at demonstrating transformational leadership behavior than managers having low emotion recognition skills. In addition, Walter et al. argued that the organizational successes of Google and

Chick-fil-A result from the EI of the respective leaders. Furthermore, when compared to IQ, EI was a better predictor of willingness to accept leadership responsibilities. Again Walter et al. argued that EI skills are necessary and complementary leadership skills; they are not mutually exclusive skill set when compared to the other measurable leadership qualities. EI skills influence the managers' view and understanding of employees' potential and performance (Deshpande, Joseph, & Berry, 2012).

Leadership skills can develop over time instead of the often-debated concept of innate characteristics and the correlation between performance and leadership style is weak (Allio, 2013). According to Allio (2013), followers' willingness to perform is important to leadership success. Therefore, managers must be skillful at understanding the collective intelligence of followers, clarifying purpose and values, and building organizational culture. Huang and Paterson (2014) argued that employees decide how they will respond to the organization by observing and interacting with their leaders. In addition, the actions of leadership are critical factors in workers' evaluations of the organization's risk-related response to the employees' actions.

The emotional maturity of managers helps them to understand that employees expect managers to be role models in the workplace. Ethical culture is a subset of organizational culture and shared cultural elements create the environment for workplace conduct (Huang & Paterson, 2014). Huang and Paterson concluded that the managers with direct employee contact have a greater influence on the employees' definition of the behaviors that are acceptable in the workplace. Similarly, Vogelgesang, Leroy, and Avolio (2013) concluded from their longitudinal study that there was a positive

relationship between follower work participation and performance and leader communication of behavioral integrity and transparency.

The purpose of Vogelgesang et al.'s (2013) study was to examine the relationship between leadership behavioral integrity and individual follower work participation and the connection between that relationship and performance. Vogelgesang et al. explored the process by which authentic leader and leader integrity behaviors such as transparency in communication and alignment between action and word influenced followers' commitment and performance. Based on the result of the research Vogelgesang et al. concluded that the leader's attitude and performance were important components in the employees' perception of the organizational culture.

In contrast to Vogelgesang et al. (2013), Grunes, Gudmundsson, and Irmer (2013) conducted a quantitative replication study with a cross-sectional design in the Australian school system. They examined the predictability of Mayer and Salovey (1997) model of EI in job performance. Based on the results of the study the authors concluded the EI variables did not predict any of the perceived leadership outcome or leadership styles. However, many researchers have identified statistically significant relationships between EI and leadership skills.

Vidyarthi, Anand, and Liden (2014) conducted a cross-sectional study in the manufacturing industry using hierarchical linear modeling to test the relationship between emotion perception and job performance. The study included 350 participants in 74 workgroups. The theoretical basis of the study was Salovey and Mayer's (1990) EI concept, Blau's (1964) social exchange theory, and Hofstede's (1980, 1981) power

distance theory. The authors concluded that leaders with high emotional perception had an advantage that helped them to influence employees' performance (Vidyarthi, Anand, & Liden, 2014).

Employees respond to their leaders and commit to the organization in reciprocation to the level of trust that exists in the manager-employee relationship. According to Vidyarthi et al. (2014), 24.3% of the variance in employees' job performance results from their perceptions of the leader's emotional competencies. In addition, the results of their analysis demonstrated significant and positive relationship between the leader's emotion and the task dependence of groups with (.44, $p < .05$). The relationship between the leader's emotion perception and the leader's power distance was significant and negative (-.33, $p < .05$). The authors concluded that there is a significant and positive relationship between leaders' emotion perception and employees' job performance. Clearly, the debate regarding the role of EI in managerial success is plentiful.

The overarching ideas from the majority of EI literature support statistically significant correlation between leadership EI skills and organizational culture and employees' perceptions. Guay (2013) conducted a cross-sectional study using multiple data sources and 1,499 participants from ten Midwestern organizations. According to Guay (2013), the perception of how well a leader's abilities fit the demands of the role is important in transformational leadership performance. In addition, Guay concluded that the relationship between person-organization (P-O) fit and transformational leadership was statistically significant and negative. Guay argued that effective transformational

leaders motivate followers to perform beyond the standard expectations; hence, transformational leaders must understand people. According to Smollan (2013), followers detect leaders' emotional authenticity and use their perceptions to formulate their opinions, beliefs, and behavior toward the organization and leader.

The EI skills of managers affect their leadership style and the employees' workplace experience. Barbuto, Gottfredson, and Searle (2014) investigated EI as an antecedent to servant leadership. They concluded that the role of EI demonstrated a positive relationship to each of the five dimensions of servant leadership. The levels of servant leadership were altruistic calling, emotional healing, wisdom, persuasive mapping, and organizational stewardship. Barbuto et al. determined that from the leader's perspective, EI had positive and statistically significant relationship with four of the five dimensions of servant leadership excluding persuasive mapping.

It is important to note that effective management skills improve with high EI skills and that EI is important in performance management (Schlaerth et al., 2013). According to the Schlaerth et al., the EI skills that enable the deciphering of emotions in self and others, provide significant advantages in managing interpersonal relationships and improve the potential for a productive workplace.

Managers with high EI are more efficient at creating organizational culture than managers with low EI skills (Kelloway, Turner, Barling, & Loughlin, 2013). Managers with high EI competence promote employee satisfaction and by extension lower turnover intentions. Hutchison and Hurley's (2013) conclusion that leaders with strong EI skills have a positive effect on the people they lead and on the organization's culture supports

the arguments of Jain, Giga, and Cooper (2013) and Kelloway, Turner, Barling, and Loughlin (2012). Jain et al. (2013) argued that managers and leaders promote employees' job satisfaction and potentially influence turnover rates and intentions. Kelloway et al. (2013) concluded from their study that leaders create organizational culture and values that the employees use as the basis for their decision-making.

The leaders' emotional competency is important in defining the overall success of the organizations that they lead. According to Ashkanasy and Humphrey (2011) and Humphrey, Ashforth, and Diefendorff (2015), the EI skill of the managers is relevant in organizational success because employees' attitudes and workplace behaviors are reflections of the manager-employee relationship. Humphrey et al. argued that the manager's ability to understand the employees' emotions help the leader to develop and manage high-quality leader-member relationships and high performing teams. Chughtai (2013) concluded that employees' commitment to supervisor strengthened the employees' work engagement, promoted innovative attitudes, and improved internal communications. The results of their study demonstrated that the quality of employee-supervisor relationship influences organizational performance.

In a study by Fernández-Berrocal, Extremera, Lopes, and Ruiz-Aranda (2014) using the MSCEIT to assess EI and Prisoner's Dilemma Game (PDG) to measure cooperation, the authors concluded that people with high EI tend to focus on the long-term strategic interest of the team in their decision-making. Conversely, people with low EI succumb under intense competition. Given that that QSR is a high-pressure customer

service environment, it is arguable that EI is a requisite skill for managers' success (Mathe-Soulek, Scott-Halsell, Kim, & Krawczyk, 2014)

Managers have a significant impact on the variables that employees use to define job satisfaction. Managers create organizational culture by being ethical (Groves, Vance, & Paik 2014), demonstrating emotional balance (Van Kleef, 2014), and functioning as role models (Ötken & Cenkci, 2012). Van Kleef (2014) argued that leaders' expressions and emotional performances provide cues that stimulate complementary responses from organizational members. According to Ötken and Cenkci (2012), employees take cues from managers concerning how to treat other people within the organization, customers, and the public.

Ogunfowora (2014) examined the relationships between ethical leadership and unit-level organizational citizenship behavior (OCB) and individual job satisfaction. The author proposed a theoretical framework based on Bandura's (1977) social learning theory, and Ashforth and Mael's (1989) social identity theory and used it to examine relationships between ethical leadership and job satisfaction. Ogunfowora concluded that the effect of ethical leadership was larger in business units reporting higher leader role model presence. According to the author, Bandura (1977) suggested that people learn from role models, and moral behavior separates good leadership from bad leadership (Ogunfowora, 2014). The results of the study supported the theory that followers' perception of the leaders' character influenced OCB and job satisfaction.

Researchers have examined and linked the manager's EI skill level to employees' turnover intentions. Titrek, Polatcan, Zafer Gunes, and Sezen (2014) analyzed the

correlations between emotional intelligence (EQ), organizational justice (OJ), and organizational citizenship behavior (OCB). The authors concluded that EQ affects OJ, OJ directly influences OCB, and EQ has an indirect effect on OCB. Titrek et al. constructed the research on the theoretical works of Goleman's (1995) EI concept, Adams' (1965) OJ theory, and Smith, Organ, and Near's (1983) OCB model. The definition of EQ included self-awareness and emotion management sublevels and the analysis provided results supporting the existence of significant relationships between the variables. According to the authors, followers' perceptions of leaders as being trustworthy and supportive of their employees, promote positive work environment. Conversely, unjust leaders create situations where turnover intentions are high.

Researchers argue that transformational leaders demonstrate high EI competency. Cavazotte, Moreno, and Hickmann (2012) investigated the effects of EI on transformational leadership and on the effective performance of leaders in managing work units. The authors examined nine variables: intelligence, the five personality traits, emotional intelligence, transformational leadership, and leaders' managerial performance, and controlled for gender, team size, and managerial experience. Based on the results of the study, Cavazotte et al. (2012) concluded that there are statistically significant relations between EI and transformational leadership. However, the relationship between EI and transformational leadership is non-significant when the researchers controlled for ability and personality.

Wang, Ma, and Zhang (2014) examined the relationship between perceptions of organizational justice and job characteristics, transformational leadership, and

organizational commitment of agency workers in a Chinese manufacturing plant. According to Wang et al., the results of the study indicated that both organizational justice and job characteristics referred to intrinsic motivation, and demonstrated a significant association with the organizational commitment of agency workers. The authors argued that the intrinsic motivation may be a driver of organizational engagement and to enhance the commitment of employees, the supervisors should be sensitive to employees' perceptions of organizational justice.

Employees' turnover decisions are personal and might include components of psychological stressors. Organizational culture is important because it affects the psychological health of employees (Laborde, Lautenbach, Allen, Herbert, & Achtzehn, 2014). Johar, Shah, and Bakar (2012) completed a study to identify the effects of mediators that influenced the relationship between the leader's personality and employee's self-esteem. Johar et al. concluded that the EI of the leader affected the relationship between the personality of the leader and employee's self-esteem. In addition, the authors argued that EI increase the energy and forcefulness of the leader's personalities. According to Johar et al., the results of the study indicated that leader's personality explained 9.4% of the variation of employees' self-esteem and 46.1% of the EI variance of the leader. In addition, the EI of the leader explained 27.4% of the variance in employees' self-esteem. Therefore, strengthening the EI competence of leaders may help to improve employees' self-esteem.

Since positive events improve stress-related resource-building capacities, and adverse event has a greater physiological impact on individuals, managers should work

strategically to increase positive events and reduce employees' stress (Bono, Glomb, Shen, Kim, & Koch, 2013; Hadley, 2014). Schutte and Loi (2014) examined the relationship between EI and workplace success within the categories of employees' mental health and person-organization interaction. Schutte and Loi argued that EI is a critical component in determining the strength of workplace social networks, employees' response to authority, and the managers' definitions the conditions within the work environment.

Managers' ability to understand the components that define employees' workplace experience is an important measure of effective leadership. Hutchison and Hurley (2013) argued that an unmitigated exposure to negative workplace behavior result in employee withdrawal from the workplace, lower staff retention, and a loss of productivity. In addition, they state that negative workplace behavior is an emotional experience, and they argued that managers with high EI skills promote job satisfaction and increase productivity. Leaders with strong EI skills have a positive effect on the people they lead and by extension on the organization's culture (Hutchison & Hurley, 2013).

Successful managers are effective in influencing people. Nielsen and Daniels (2012) concluded that the different levels of perception regarding leaders' transformational qualities result from the followers' personal opinions of multiple job-related factors. Therefore, Nielsen and Daniels argued that it was important for leaders to understand how leadership qualities and skills inform followers' perceptions of job satisfaction. Leaders create, embed, and strengthen organizational culture and there is a

significant and negative correlation between the EI of leaders and employees' turnover intentions (Mohammad, Lau, Law, & Migin, 2014).

Organizational Culture and Job Satisfaction

QSR employees are frontline service personnel who are in frequent customer contact roles. Employees' experiences are qualitative and situationally specific. Therefore, factors that influence their experiences are important to managers. Ackfeldt and Malhotra (2013) investigated the influences of employee empowerment and professional development on workplace relationships. According to Ackfeldt and Malhotra (2013), role stressors have a negative correlation with organizational commitment in front-line employees. Ackfeldt and Malhotra argued that management should understand role stress and strategically intervene to reduce the effects that role stress has on employees and in creating organizational commitment.

Ackfeldt and Malhotra (2013) concluded that development and empowerment are important tools in the promotion of employee-organization commitment relationships. Employee-organization commitment relationship is a reflection of the organizational structure (Schutte & Loi, 2014) and employees perceive managers as the proxies for organizations (Vandenberghe, Bentein, & Panaccio, 2014). According to Kelloway, Turner, Barling, and Loughlin, (2012), managers who practiced active management-by-exception and laissez-faire attitudes encourage employees' dissatisfaction and hostility towards the organization. Kelloway et al. (2012) argued that organizational leaders promote job satisfaction and influence employees' perceptions of the company by creating organizational cultures that value employees' contributions.

Organizational citizenship behavior (OCB) is a measurement of employees' commitment to organizations. Tang and Tang (2012) conducted a study to examine the

effect of high-performance human resource practices on the OCB of employees within the hotels industry. According to Tang and Tang, OCB is an important component for improving service quality and customer satisfaction. Tang and Tang completed the study within two distinct frameworks of justice climate and service climate using Blau's (1994) social exchange theory and Salancik and Pfeiffer's (1978) social information processing theory as the foundation for the study. The study included 119 hotel HR managers and 1133 customer contact employees from 119 hotels. Participants completed questionnaires assessing justice climate, service climate, and their service engagement.

Organizational culture affects employees' perceptions of job satisfaction and the employees' customer service attitudes. Therefore, organizational culture relates to customer satisfaction. Tang and Tang (2012) concluded that the HR practices for establishing and maintaining acceptable social climates in organizations can influence employees' discretionary behaviors. Furthermore, the authors argued that HR practices serve important roles in shaping the social climates of organizations in defining the behaviors of employees. Limitations of the Tang and Tang's study include; the possibility of common source error due to employees' self-rating, HR managers provided the HR perspectives of the organization, limited understanding of the practices considered within the studies, and the ignoring of organizational non-HR factors. Tang and Tang's conclusion supports the role of HR management in fostering, promoting, and maintaining organizational climates that employees consider satisfying. According to the authors, there are direct correlations between management practices, employees' behaviors, and customer experiences (Tang & Tang, 2012).

Managers' roles and influences are inseparable from the workplace climates and events. According to Bennett and Sawatzky (2013), managers with low EI promote high-conflict work environments in which employees and managers experience high stress, low job satisfaction, and above average interpersonal conflicts. Conversely, emotionally aware and competent leaders create positive work environments. In addition, Bennet and Sawatzky argued that the toxic work environments created by managers with low EI result in customer dissatisfaction, employees' perceptions of managers as bullies, high turnover rates, and reduction in organizations' performance and profitability. Bennet and Sawatzky's conclusions are consistent with the findings of Tang and Tang (2012).

Mawritz, Mayer, Hoobler, Wayne, and Marinova (2012) completed studies across three hierarchical levels of the organization. The levels included manager, supervisors, and employees in United States technology, government, insurance, finance, food service, retail, manufacturing, and healthcare industries. The participants were $n = 1423$ employee and $n = 295$ supervisors from a sample of 288 work groups. The authors used social learning theory and social information processing theory as the basis of the hypotheses for the study. Mawritz et al. concluded that abusive behavior by managers affects two hierarchical levels and the relationships between the variables are stronger when the climate of hostility is high.

Researchers have argued that managers define organizational culture and the overall employee workplace attitude. Mawritz et al. (2012) concluded that supervisors model both the positive and negative leadership behaviors towards their subordinates. Furthermore, employees in hostile work environments freely engage in the hostile deviant

behavior, and these findings are consistent with both social learning and social information processing theories. Employees reflect the expectations of the leaders. The longer the abusive relationship exists, the lower the employees' OCB. Abusive supervisor-employee relationships negatively affect organizational culture (Gregory, Osmonbekov, Gregory, Albritton, & Carr, 2013).

Bullying, victimization, and prosocial behaviors influence turnover intentions. Schokman et al. (2014) examined the relationships between attitudes with bullying and EI outcome of bullying, victimization, and prosocial behaviors. The authors concluded that emotional management and control positively relate to provictim attitudes and negatively relate to bullying attitudes (Schokman et al., 2014). Therefore, managers with low EI skills promote hostile work environments. EI training improves the integrity of interactions between leaders and followers (Blumberg, Giromini, & Jacobson, 2015; Fu, 2014). Leadership training may enhance workplace culture because leaders learn to role model OCBs and participate in team-building efforts (Ceravolo, Schwartz, Foltz-Ramos, & Castner, 2012)

Researchers have established that employees' perception of job satisfaction relates to turnover intentions. Job satisfaction positively correlates to EI (Al-ghazawi & Awad, 2014). In addition, there is an intricate relationship between job satisfaction and organizational climate, which is an important element in managing employees' relationships. Variables such as gender, culture, age, and organizational politics are arguably moderating influences in leadership styles and organizational cultures. Crowne (2013) used regression analysis to examine the effect of cultural exposure on EI in a

study with 485 participants. The results of the study indicated that cultural exposure influences cultural intelligence. However, cultural exposure did not affect EI (Crowne, 2013).

According to Crowne, detail analysis of the relationships between EI and cultural exposure supports the ideas that the relationships between the variables are not significant. Leisanyane and Khaola (2013) argued that the relationships between all cultural traits and turnover intentions illustrate negative and significant correlation. According to Emmerling and Boyatzis (2012), emotional and social intelligence competencies provide a valid and reliable basis for studies in the development of occupations and cultures because a valid intelligence is applicable and measurable cross-culturally.

There is an inverse relationship between employees' perception of organizational politics and employees' commitment to the organization (Utami, Bangun, & Lantu, 2014). Utami et al. (2014) examined the relationship between employees' perceptions of organizational politics and organizational commitment using trust as mediating variable and EI as moderating variable at various organizations in Indonesia. Utami et al. concluded that trust is a mediating variable and EI is a moderating variable between the dependent and independent factors. Furthermore, while trust positively influenced employees' organizational perceptions and commitments, EI influenced the direction of the employees' perceptions and changed the commitment from negative to positive. Therefore, emotionally intelligent managers can influence employees' OCB.

Researchers including Wojciechowski, Stolarski, and Matthews (2014) examined the relationships between gender, ability EI, and performance using Face Decoding Test (FDT) to measure the inconsistencies between facial and verbal cues and emotions. The authors concluded that there is a correlation between EI and superior face decoding in all conditions and that gender has a mediating effect on EI abilities. The scores for women were higher than the scores for men in the study. Leadership and employees' experience may be situationally specific. However, leadership competencies including EI are important in establishing and improving interpersonal relationships.

Petrovici and Dobrescu (2014) conducted experiments with 250 subjects to identify the role of EI in developing interpersonal communications skills using the ten-item Emotional Intelligence Test to measure personal emotion awareness, optimism, empathy, problem-solving ability, solution generation, cultural sensitivity and tolerance, relational skills, and emotional self-control. Petrovici and Dobrescu concluded from examining the data that women display higher levels of EI in comparison to men. In addition, the combination of self-control and the demonstration of empathy enhance interpersonal relationships. However, Ceravolo et al. (2012) stated that the educational workshops influence organization-wide changes in the workplace culture. Therefore, gender and EI skills are learnable and not restricted by gender. Managers' EI skill levels are more important than gender in interpersonal relationships (Ceravolo et al.).

Similar to gender, cultural dimensions such as collectivism, uncertainty avoidance, and long-term orientation positively affect different facets of EI (Gunkel, Schlägel, & Engle, 2014). Gunkel et al. (2014) conducted a study with 2067 participants

in nine countries to examine the influences of cultural on emotional intelligence. According to Gunkel et al., women in the study demonstrated a better ability to recognize emotional cues in others while men demonstrated more efficient regulation of their emotions than the female participants. Alpullu (2013) concluded that EI skills correlate positively with age and experience. Alpullu found that age is an important facet of EI. Age and experience are essential components in managers' sense of responsibility, self-motivation, and by extension significant in emotional intelligence capability (Apullu, 2013).

General intelligence relates to academic success. However, having general intelligence does not translate to an automatic success in professional life (Jakupov, Altayev, Slanbekova, Shormanbayeva, & Tolegenova, 2014). In a study to examining the relationship between the level of education and EI in modern conditions, Jakupov et al. argued that EI abilities improve with an increase in education, affects social adaptation of personality in interpersonal relationships, and influences professional success. According to Jakupov et al., professional success is a measure of social adaptability -the ability to understand the people's emotion and to adjust communication as appropriate. Furthermore, Jakupov et al. concluded that building a culture of respect and tolerance improves the EI abilities in both leaders and followers. Castro, Gomes, and de Sousa (2012) support the ideas that supervisors, who understand EI, can influence workers' creative output.

Jung and Yoon (2012) conducted a study to understand the interrelationships among EI, counterproductive work behaviors, and OCB. Jung and Yoon concluded that

employees' understanding of colleagues' emotions reduces counterproductive work behaviors, and the relationship between EI and OCB is significant and positive. The authors argued that by recruiting employees with high EI skills, leaders of organizations are promoting the potential for achievement of organizational objectives, improving customer service, and creating stable, collegial work environments (Jung & Yoon, 2012).

Leaders' role modeling behavior influences employees' perception of job satisfaction, OCB, and overall work related intentions. Mathe and Scott-Halsell (2012) completed a study to examine how leaders of organizations affect employees' sense of psychological empowerment, workplace perceptions, and how employees' perceptions influence the state of psychological capital. The population for the study included QSR employees at all levels. According to Mathe and Scott-Halsell, employees' workplace perception influences the beliefs about peer perceptions. Furthermore, a high organization prestige results in a collective feeling of hope, optimism, resilience, and self-efficacy, and better customer orientation. The authors argued that the opposite effect is true when perception and prestige are low. Customer orientation is a learnable skill that organizational leaders should teach managers to develop and share with employees, who will, in turn, enhance the customers' experiences.

Customers perceive positive links between employees' hospitality, food quality, and effective response, and customers obtained social and emotional benefits from enjoyable hospitality experiences (Teng & Chang, 2013). Teng and Chang argued that improving customers' value perceptions by focusing on positive employee engagement and relationship building is important for restaurant managers. Managers, who invest

emotional abilities in the well-being of employees, strengthen their personal capacity to cope and create a framework of manageability for workplace relationships. In addition, the managers build EI skills such as self -awareness, self-management, social awareness, and relationship management (Aradilla-Herrero, Tomás-Sábado, & Gómez-Benito, 2013; Bailey, Murphy, & Porock, 2011). Yuan, Tan, Huang, and Zou (2014) concluded that EI positively correlates with job satisfaction, and job satisfaction positively correlates with perceived general health. In addition, job satisfaction mediated the relationship between EI and perceived general health.

Job Satisfaction and Turnover

Job satisfaction is the strongest predictor of turnover intentions (Leisanyane & Khaola, 2013). Hancock, Allen, Bosco, McDaniel, and Pierce (2013) examined the concept that turnover can be a positive experience and that moderating variables affect the way organizations experience the effects of turnover. Turnover rates and financial performances are benchmark variables in measurements of labor productivity, customer service, and quality and safety. Therefore, Hancock et al. argued that the consequence of turnover is low in retail and food service industries. They proffered that geography is a significant variable affecting organizational turnover experiences. However, high turnover rates add significant challenges to the operations of organizations within customer service industries (Hancock et al.)

According to Hancock et al. (2013), managing turnover at an optimal level and minimal organizational cost is beneficial. Dong, Seo and Bartol (2014) stated that organizations reduce the cost of recruiting, selecting, hiring, and training by investing in

employees' development. Investing in employees' development improves efficiency and job satisfaction, and reduces turnover rates. Park and Shaw (2013) conducted a meta-analysis of turnover related studies and determined that there is a significant negative correlation between turnover rates and organizational performance. In a study with Border Security Force (BSF) in India, Chhabra and Chhabra (2013) used the Personal Profile Survey (PPS) to measure EI and concluded that there is a negative correlation between occupational stress and EI. QSRs are emotionally demanding, high customer service, and high-stress workplaces.

Unmitigated exposure to negative workplace behavior results in employees' withdrawal from the workplace, lower staff retention, and productivity loss (Hutchison & Hurley, 2013). In addition, Hutchison and Hurley stated that negative workplace behavior is an emotional experience, and high EI skills relate to high job satisfaction and productivity. Dong et al. (2014) analyzed the relationship between developmental job experiences (DJE), employee job satisfaction, turnover intentions, and the role of EI in reducing turnover intentions. The authors argued that balancing DJE intention with employees' perceptions of job satisfaction and psychological well-being reduces turnover intentions. According to Dong et al., ignoring the EI components of employees' development will result in DJE failure and employees' affective experience is a critical component of job satisfaction or turnover intentions.

High turnover rates are important issues within the QSR industry and improving employees' job satisfaction may reduce employees' turnover rates (Mathe, Scott-Halsell, & Roseman, 2013). Mathe et al. examined the relationships between objective

performance measures for service quality, customer satisfaction, and unit revenues in a study. Based on the results of the study, positive employees' attitudes are emotionally contagious and influence customers' perceptions of service quality and customers' brand commitment. According to Mathe et al., employees use the quality of the workplace interaction to formulate opinions regarding employee-organization relationship decisions.

Vandenberghe, Bentein, and Panaccio (2014) examined the relationship between employees' commitment to organizations and supervisors and turnover rates. Based on the results of the study, Vandenberghe et al. concluded that employees' perceptions of congruence between supervisors' performance and organizational culture are a mediating factor in employees' commitment and turnover rates. According to Vandenberghe et al., employees develop perceptions about organizations before developing knowledge that is manager specific. In addition, whenever employees believe managers' performances are consistent with the organizational culture, the perception of the managers is an essential component of the turnover intentions. Conversely, Vandenberghe et al. argued that whenever employees perceived managers' role to be inconsistent with the organizational culture, the manager's performance is insignificant in employees' turnover intentions.

Turnover can be beneficial. However, there are inherent costs for recruiting, hiring and training. Unmanaged turnover can result in increased HR expenses and loss of organizational efficiencies. Optimal turnover rates may be beneficial; however; organizational performance may suffer (Park & Shaw, 2013). According to Park and Shaw (2013), the context of employment such as employment systems, dimensions of organizational performance, region, and size influences the level and quality of

relationships among the variables. Park and Shaw argued that the results of turnover are more harmful in voluntary turnover and reduction in force than in involuntary turnover scenarios. Accordingly, a one *SD* increase in turnover rate is associated with -.15 *SD* reduction in organizational performance. The authors concluded that failing to address turnover issues had adverse performance effects within organizations (Park & Shaw).

Arguably, empowerment is the leadership behavior that includes leading by example, coaching, informing, demonstrating concern for others, and involving others in decision-making activities (Fernandez and Moldogaziev, 2013). Fernandez and Moldogaviez (2013) concluded that empowerment has significant relationships with innovativeness, job satisfaction, and performance. According to the authors, one standard deviation (*SD*) increase in empowerment results in 0.89 *SD* increase in job satisfaction, a 0.79 *SD* increase in innovativeness, and a 0.55 *SD* increase in performance. Meisler (2013) concluded that EI and employees' perceptions of organizational justice (OJ) share a positive relationship and, a negative correlation to turnover intentions. Gender, education, and tenure were control variables in the Meisler's model. EI and perceived justice explained 23% of the variance in turnover intentions, and turnover intentions significantly predicted job perseverance in organizations. According to Meisler (2013), EI affects the way employees perceive organizational justice, which in turn influences turnover intentions.

Transformational leadership skills reduce employees' job dissatisfaction, intention to quit, and the organization's turnover rates (Waldman, Carter, & Hom, 2012). According to Waldman et al. (2012), qualities of leadership or leadership style are unique

influencing factors in employees' turnover intentions and perceptions of job dissatisfaction. Waldman et al. argued that transformational leadership might affect the rate of staff turnover by lessening workers' perceptions of job dissatisfaction. The authors noted that employees who quit often cite dissatisfaction with unfair and abusive supervision as the main reason for leaving.

Coetzee and Harry (2014) used bivariate correlation analysis to assess the relationships in the management of emotions and EI link to career adaptability. Vidyarthi et al. (2014) used hierarchical linear modeling to test the relationship between emotion perception and job performance. The results of both studies demonstrated significant and positive correlation between the leader's emotion and the task dependence of groups. The relationship between the leader's emotion perception and the leader's power distance was significant and negative (-.33, $p < .05$).

Waldman et al. (2012) argued that the level of employees' job integration result from leadership skills, and may serve as a buffer to effect disruptive events that prompt deliberations about leaving. According to Waldman et al. (2014), effective leaders help to promote work environments in which employees experience relationship identification, perceptions of job-fit, and identification with leaders' values and goals. Workers sense of job-fit and identification with leaders' values and goals tend to over-ride environmental discomforts that may prompt intentions to quit. Bagozzi et al. (2013) focused on the role of social intelligence and EI in the psychological dimensions of Machiavellianism.

Bagozzi et al., (2013) argued that Machiavellianism relates to organizational behavior and management topics including leadership, counterproductive work attitudes,

organizational politics, job dissatisfaction, and lack of organization citizenship behaviors. In addition, corporate culture and the context of the employee, customer, and manager interaction define the level and quality of leader-follower relationship. Employees' perceptions are important in the leader-follower relationships and perception is an emotional construct (Rogers, Schröder, & Scholl, 2013; Scholl, 2013)

Emotions are important in the formulation of perceptions (Killgore, Sonis, Rosso, & Rauch, 2016). Therefore, EI competent managers are better equipped to understand and define the psychological and emotional experiences of employees. Abbas, Raja, Darr, and Bouckenooghe (2012) examined the effects of perceived organizational politics (POP) and psychological capital (PsyCap) on turnover intentions, job satisfaction, and supervisor-rated job performance. According to Abbas et al., employees' perceptions of high POP results in lower job satisfaction, lower job performance, and higher turnover rates. Therefore, workplace politics, poor communication, lack of proper feedback and guidance, and ambiguous policies and procedures have a harmful effect on employees' wellbeing. Teaching managers to be competent in the use of EI skills can positively influence subordinates' work performance (Gunkel, Schlägel, & Engle, 2014).

The EI skills of managers are important in the ability to develop and manage successful teams. Farh, Seo, and Tesluk (2012) conducted research with 346 full-time professional and early-career managers from a part-time MBA program in the Mid-Atlantic United States. The purpose of the study was to identify the relationship between EI, teamwork effectiveness, and job performance. Farh et al. focused on the Mayer and Salovey's ability-based model of EI instead of on mixed models such as the Bar-On

model. The authors controlled for the effects of demographic variables such as age, gender, employment status, and job tenure (Farh et al.). The researchers used the MSCEIT V2.0 instrument to assess EI.

Farh et al. (2012) concluded that the relationship between EI and teamwork effectiveness is higher in a high manager work demand (MWD) job context. According to Farh et al., emotional regulation ability correlates to job performance under high emotional labor context. Farh et al. argued that the relationship between EI and performance is neither direct nor positive nor significant as Goleman (1995) argued. However, leaders create organizational culture by promoting employees' well-being and job satisfaction. The emotionally intelligent manager has the advantage in building satisfying work environment because he or she is capable of understanding the principles that govern and promote interpersonal interaction (Martin-Raugh, Kell, & Motowidlo, 2016).

Organizations invest a significant amount in personnel development and retention, however, reduced turnover occurs haphazardly, and high turnover remains a major challenge. Identifying teachable and learnable skills improve leadership capabilities (Goleman, 1995) and may enable managers and companies to target and reduce turnover rates. The potential net gain is a significant boost to bottom-line performance (Mathe, Scott-Halsell, & Roseman, 2013) and improvement in employees' psychological well-being (Bar-On, 2010).

Assessment Instruments

Researchers and EI practitioners use different EI assessment instruments to assess various components of EI. The Emotional Quotient Inventory (EQ-i) developed by Bar-On, (1997); Multi-Health Systems, Inc. (2011); Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) developed by Mayer, Salovey, and Caruso, and the Emotional Competency Inventory -2 (ECI-2) developed by Goleman and Boyatzis are three statistically validated EI instruments (High Performing Systems, 2012). Researchers use factors such as cost, intention, accessibility, and validity and reliability of the survey instrument in the decision-making regarding which instrument is best suited for a specific study.

Choi and Kluemper (2012) examined the validity of four EI assessment instruments. The researchers tested the validity of the MSCEIT, Test of Emotional Intelligence (TEMINT), Self-Report Emotional Intelligence Scale (SREIS), and Other Report Emotional Intelligence Scale (OREIS) for predicting the social functioning and academic performance of individuals. The authors concluded that the MSCEIT did not significantly correlate with any of the other three EI measures. In addition, there were no correlations between the TEMINT and the EI reports although the TEMINT was the strongest predictor of academic performance while the MSCEIT was the strongest predictor of trust. There were three conclusions from the Choi and Kluemper (2012) study. First, the results of the assessments may be context related. Second, the applicability of EI assessment instruments can be study-specific. Third, the EI assessment instrument can influence the outcome of the study.

Mishar and Bangun (2014) conducted a literature review to assess the combined Goleman and Bar-On's EI theories and to create a modeling instrument to examine the relationship between EI and psychological defense mechanisms. According to Mishar and Bangun (2014), the three major EI assessment instruments are Emotional Competency Inventory (ECI), Bar-On's emotional Quotient Inventory (EQ-i), and the MSCEIT. Mishar and Bangun stated that ECI and EQ-i are subjective because of the self-report and other-report method while the MSCEIT is an objective, performance-based test that is suitable for use in clinical, educational, and workplace settings. In addition, the MSCEIT is a valid EI assessment instrument.

Mishar and Bangun (2014) concluded that a combination of Bar-On's focus on social intelligence and Goleman's focus on intelligence competence help individuals to improve self-management skills, performance management skills, and reduce negative defense mechanism. Fiori et al. (2014) argued that the MSCEIT is ideal for identifying low EI competence because the questions in the assessment instrument do not challenge the EI ability of a person with high EI ability.

Di Fabio and Saklofske (2014) investigated the effect of trait EI, fluid intelligence, and personality traits in career-related decision-making. Di Fabio and Saklofske (2014) focused on the variances among the models of EI as they relate to fluid intelligence and personality traits. The authors' study included a final sample of 194 participants from age 16 to 19 years. Girls made up 57.73% of the participants. The authors used Advanced Progressive Matrices (APM) to assess fluid intelligence; Big Five Questionnaire (BFQ) to measure the components of openness, and MSCEIT to measure

the ability based EI skills. In addition, DiFabio and Saklofske analyzed the data for self-reported EI traits using the Bar-On Emotional Intelligence Test (Bar-On EQ-i). The authors analyzed the data for the four principal EI dimensions using the Traits Emotional Intelligence Questionnaire Short Form (TEIQue).

Di Fabio and Saklofske (2014) evaluated the results against the variables for career decision making and indecisiveness. According to the authors, EI traits provided additional decision-making strengths beyond personality traits. Based on the results of the research, the authors concluded that MSCEIT, EQ-i, and TEIQue shared overlapping assessment capabilities as well as mutually exclusive focus areas. According to Di Fabio and Palazzeschi (2015), the TEIQue accounts for greater incremental EI related scholastic success than the EQ-i. According to Rubio (2014), the EQ-i-M20 is a modification of the Bar-On (1997) EQ-i. The authors demonstrated that EQ-i-M20 was a valid and reliable measure of the benefit of high levels of EI for older population in Spain. Rubio (2014) concluded that the factorial structure of the EQ-i-M20 was consistent in the test and retest and the five-factor structure of the assessment was consistent in both populations measured 2-years apart.

Killian (2012) examined the psychometric characteristics of Emotional Self-Awareness Questionnaire (ESQ) by administering the assessment instrument to 1406 undergraduate psychology students. The purpose of the study was to establish the reliability and validity of a new measure of EI and determine whether the construct accounts for individual differences in life satisfaction, grade point average, and leadership aspirations. The researcher used ten online questionnaires to measure the

various components of the study. Killian used the 118-item ESQ to assess 11 aspects of EI in four clusters. Based on the results of the study, Killian (2012) concluded that additional research of the EI construct from the ESQ is necessary.

Mayer, Salovey, Caruso, and Sitarenios (2003) measured the validity and reliability of the MSCEIT V2.0 assessment instrument in a sample of 2,112 adult respondents. The participants were age 18 or older and completed the MSCEIT V2.0 booklet or on-line forms. Independent investigators in 36 separate academic setting from different counties administered the assessments. The MSCEIT V2.0 produced two set of reliability statistics, according to a general or expert scoring criterion. The full test split-half reliability was $r(1985) = .93$ for general and .91 for expert consensus scoring. According to Mayer et al. (2003), the respective reliability scores in the two Experiential and Strategic Area reliabilities were $r(1998) = .90$ and .90 and $r(2003) = .88$ and .86 for general and expert scoring. The four branch scores ranged between $r(2004\text{-}2008) = .76$ to .91 and the individual task reliabilities from $\alpha(2004\text{-}2011) = .55$ to .88. The authors argued that the reliability at the area level was *excellent* and *good* at the branch level. Consequently, interpretations of scores from the MSCEIT V2.0 are better at the total scale, area, and branch level. Mayer et al. stated that the MEIS produced higher yet inconsistent task level reliabilities.

Mayer et al. (2003) stated that the MSCEIT V2.0 test scores at the Branch, Area, and Total test levels were high with lower task-level reliabilities. According to the authors, Brackett and Mayer (2001) reported 2-week test-retest reliabilities of $r(60) = .86$ and they concluded that one-, two-, and four-factor model assessments of the EI domain

using the MSCEIT V2.0 is valid. Weerdt and Rossi (2012) completed a study to examine the validity of the EQ-i, and the convergent and divergent validity of the EQ-i with the Minnesota Multiphasic Personality Inventory -2 (MMPI-2). Based on the results of their study, the authors concluded that the EQ-i instrument results demonstrated *very good* reliability and participants with high EI factors demonstrated less behavioral and personality problems. The authors found that participants with high EI experience fewer psychological problems and pathology than people who have lower EI skills. Weerdt and Rossi's conclusions support Bar-On's (1997) argument that the EQ-i is a valid and reliable measure of the internal success factors in individuals.

Maul (2012) examined the possible interpretive arguments addressing the variations in research results from studies including the MSCEIT as an assessment instrument. There were concerns at various levels of studies using the MSCEIT. Maul argued that the MSCEIT scoring method is difficult to interpret because it uses a consensus –based system. According to Maul, it is challenging to extrapolate universe scores to target scores. However, the results of correlational studies tend to support the MSCEIT as measuring EI. Therefore, Maul argued that the MSCEIT is not ideal for assessing EI where sublevel scores are important. In contrast, the EQ-i 2.0 generates subscale measures that are suitable for analyzing the factors within the general EI competency and for use in creating personalized EI development plans (Multi-Health Systems, 2011). MHS provides an online assessment of EI competencies for professional, educational, and clinical purposes (MHS, n.d.).

The MSCEIT is an ability-based measure of EI, and the EQ-i 2.0 is a trait-based measure of EI (MHS, 2011). Research results produced no overlaps in the constructs measured by the MSCEIT and the EQ-i 2.0. Therefore, trait-based EI and ability-based EI are independent constructs. According to MHS (2011), the normative sample for the standardization of the EQ-i 2.0-assessment instrument includes 4000 participants chosen from among a group of 10,000 assessments. Distribution of the sample by gender and age matched the model for the North American Census based on race/ethnicity, geographic region, and the highest level of educational attainment. The developers of the EQ-I 2.0 examined the reliability and validity of the instrument using independent datasets. Based on the results of five exploratory EFAs conducted on the subsample of the normative sample, a three-factor solution was determined to be appropriate based eigenvalues and interpretability criteria. In addition, the norming process resulted in standard scores with means of 100 and standard deviations of 15 for the total EI score, composite scales, and subscales. Results revealed that skewness values ranged from -0.93 to -0.15; kurtosis values ranged from -0.17 to 0.77, and an examination of the scale histograms produced consistent results of normality. Therefore, the developers concluded that the EQ-i 2.0 items are measuring EI as a single cohesive construct.

Using content validity analyses, researchers established that the EQ-I 2.0 measures the relevant facets of the Bar-On conceptualization of EI that include an overarching single factor EI, five correlated composite scales, and 15 correlated subscales. Overall, the EQ-i 2.0 demonstrated sound reliability with high internal consistency. According to the MHS (2011) EQ-I 2.0 *User Handbook*, calculating the

difference between Time 1 and Time 2 standard scores for test-retest samples with a 95% confidence interval validated the stability of the EQ-i 2.0 scores. The examination produced scores that remained stable over time and more than 90% of the scores remained within one normative *SD*. The results of the studies support my choice of the EQ-i 2.0 as a valid and reliable assessment instrument for my study. The EQ-i 2.0 online self-rating instrument is a cost effective tool for measuring EI of participants across a large geographic area.

Transition and Summary

Section 1 was a review of the purpose of the study, theoretical concepts, research method, and design. The literature review included a discussion of the evolution of the EI concept from Thorndike (1920) to the three prominent EI theories of Salovey and Mayer (1990), Goleman (1995), and Bar-On (2010). The analysis of the literature provided the rationale for the examination of the possible relationships between EI of QSR managers, OE scores, and turnover rates using the EQ-i 2.0 instrument to measure EI, and IBM SPSS software to analyze the data.

Section 2 includes details regarding my role as the researcher, specifics relating to the population, sampling, and data management for the study. I discussed my choices and rationale for choosing the quantitative research method, correlational design, the ethical obligations of the researcher, data organization techniques and analysis, instrument and study reliability and validity. Section 3 includes results from the research and the analysis of the data using methods that are consistent with quantitative correlation studies. I shared the insights and conclusions from the analysis. Section 3 concluded with my

recommendation of how the results of the study may apply to future research and the business and social implications of my research findings.

Section 2: The Project

Section 2 includes a description of my role as the researcher in the data collection process and relationship with the topic, participants, and processes for assuring the study's validity. The information in Section 2 covers participant specific details including eligibility criteria and strategies for gaining access to and establishing working relationships with the participants. In addition, the material includes expanded discussions about the research method and design, population sampling, ethical research considerations, description of the assessment instrument, and data analysis procedures. In summary, Section 2 includes details regarding sample size, instrument reliability, data collection technique, and method; data assumptions, potential errors, and processes for addressing the threats to statistical conclusion validity, instrument reliability. I provided a rationale for the generalizability of the research and results.

Purpose Statement

The purpose of this quantitative correlation study was to examine the possible relationship between the GM's EI, OE scores, and the employee turnover rate at restaurants from holding companies at Brand X QSR. The holding companies operate approximately 83 restaurants within the Southeastern U.S. market. The independent variables were GMs' EI and OE scores. The dependent variable was service employees' turnover rate. I examined the relationships among the variables (Kleinbaum, Kupper, Nizam, & Rosenberg, 2013). High employee turnover rates deplete the financial resources of companies (Mathe, Scott-Halsell, & Roseman, 2013; Park & Shaw, 2013);

affect the welfare costs in communities, and displace workers who struggle to find gainful employment (Kuminoff, Schoellman, & Timmins, 2015).

Role of the Researcher

The researcher's role is to be objective and unbiased in the design, collection, and analysis of studies' data (Stangor, 2014) and to maintain the ethical standards that ensure participants' protection and awareness of the rights to withdraw from the study (U.S. Dept. of Health & Human Services, 1979). As required by federal regulation and assured by Walden's IRB, the participants received a consent form. The consent form included primary contact information and sponsoring institution information, selection criteria, benefits, potential risks, and purpose of the study, required participation, a guarantee of confidentiality, and point of contact information. As a prerequisite, I completed the National Institutes of Health's (NIH) training course for protecting human participants (certificate in Appendix A) and the EQ-i 2.0 / EQ 360 certification program (certificate in Appendix B).

It is a researcher's ethical responsibility to abide by the guidelines established in The Belmont Report regarding research involving human participants (U.S. Department of Health & Human Services [HHS], 1979). Protection for the participants included respect for persons, beneficence, and justice (HHS, 1979). According to the HHS (1979), respect for persons mandates that research participants are autonomous agents who retain their inherent will and rights to personal choice. In addition, beneficence obligates researchers to treat participants in an ethical manner by respecting their decisions and

protecting them from harm. Addressing justice requires that participants gain benefit from participating in research that produces material gain.

As a member of management in the QSR industry, I participate in the recruiting, hiring, and training and development of personnel. Reducing turnover, creating a healthy organizational culture, and improving performance and profitability are critical managerial functions in the QSR industry. I have worked at a Brand X franchise for more than 25 years but I have no professional or social relationship with any of the participants. I have peer level association with the operations supervisors of the companies that employ the participants. The operations supervisors provided access to a purposive sample of participants and the company data for OE scores and employee turnover rates.

I chose to study the particular population because I have prior knowledge of the job-related roles, responsibilities, functions, and as Luse, Mennecke, and Townsend (2012) argued the topic is of personal interest. Identifying a possible solution that can reduce turnover rates in the QSR industry might have significant positive effect on my company, industry, and community. I have tracked, and recorded turnover rates within QSRs and have been involved in conflict resolution at multiple levels within the restaurant environment. I have participated in the training and development of QSR employees and managers, and I theorized that there is a possible significant relationship between the GMs' EI skills and their ability to communicate within the work environment.

Participants

The targeted population for the research was general managers of Brand X QSR. The participants represented a purposive sampling from among restaurant GMs at the companies in the study. Inclusion criteria consist of being in the general manager position for a minimum of 6-months. Turnover and OE data were available and associable to the QSR business unit and participant for the research period. Exclusion criteria consisted of administrative actions that resulted in the GMs separation from the business unit for more than 1-month during the time for which the turnover rate and OE score are available. Including participants with the requisite qualification, skill set, and experience enables the researcher to collect relevant research data (Loh, 2012).

For this study, the operation supervisors of the companies at Brand X QSR provided access to a purposive sampling of GMs with a minimum of 6-months experience in the GM role (Bristowe, Selman, & Murtagh, 2015). According to Daniel (2012), the selection of population criteria should include consideration of the nature of population -content, size, heterogeneity/homogeneity, accessibility, spatial distribution, and destructibility. The operations supervisors identified potential participants and distributed the open link invitation to the general restaurant managers who met the inclusion criteria. The operation supervisors at the participating companies identified potential participants for the study, based on the inclusion criteria. Because of the wide geographic dispersion of participants' locations, an online self-assessment was the primary method of data collection. I distributed the consent form including the open invitation link to the organization leaders and they forwarded the invitation to the

managers within the organization. Email communication was the primary method of communication with the participants. The email included contact information that the participant could use in case there were questions or comments.

I sent an email invitation to each participant via the organization leader. The email included a brief summary of the EI concept and a link to the online survey for each participant. The participants accessed the survey by following the embedded link in the invitation to a secure online assessment portal. Completing the survey served as an acknowledgment from the participant of his or her willingness to participate in the study. The participants completed the EQ-i 2.0 EI assessment via the online portal of Multi-Health Systems (MHS) Inc. MHS tabulated the EI score for each manager and generated an email notification as each participant completed the assessment. If there was a delay of 3 or more days for the completion of the assessments, I resent the invitation to the organization leader. Upon notification of completion, I logged into my personalized MHS assessment portal accessed, generated, and downloaded the completed dataset. The participants received no financial incentives for participating in the study.

Research Method and Design

Research Method

Quantitative research includes the collecting of numerical data (Jupp, 2006), examining variables to identify possible correlations, and testing hypotheses or answering research questions (Venkatesh, Brown, & Bala, 2013). Quantitative studies are useful for providing closure and defining the framework for research (Scott & Barrett, 2013). The study included numerical benchmarks and was data-driven. Therefore, quantitative

methodology was ideal for the research. In contrast to quantitative research, qualitative researchers explore unstructured phenomena by analyzing themes and employing interviews and observations (Bryman, 2012).

Results from qualitative studies provide an in-depth understanding of the research phenomena; however, the data from qualitative studies are insufficient to support definitive hypothesis reject or accept decisions (Bryman, 2012). In addition, researchers in qualitative studies, employ the qualitative phenomenological framework to understand the lived experiences of participants (Smith, 2015). Although the mixed method approach produces more data and understanding for addressing the research questions than exclusively qualitative or quantitative studies (Venkatesh, Brown, & Bala, 2013), using a mixed-method would have required more time than was appropriate for this study. The quantitative methodology was ideal to accomplish the current research objective.

Research Design

Quantitative studies are ideal for understanding relationships that exist between the independent and dependent variables in the study. The variables in the current study were quantifiable and numerically expressed. Quantitative research is useful in examining the significance and nature of relationships among variables (Zachariadis, Scott, & Barrett, 2013) and for understanding the strength of any interactions from an objective external point of view (Rovai, Baker, & Ponton, 2013).

A quantitative, correlation design was ideal for the addressing the research question. Mertler and Vannatta (2013) argued that correlation studies are ideal for examining the relationships between two or more quantitative variables. Correlation

studies are ideal for studying the relationships between quantitative variables and estimating functional associations (Cohen, Cohen, West, & Aiken, 2013). It is impossible to control all of the forces that are influencing the research outside of a laboratory. Therefore, quantitative study is suitable for the current research. According to Mertens (2014), researchers with a postpositivists worldview are the primary users of quantitative design in studies analyzing the theoretical implications and associations among variables.

The research design was consistent with Mertler and Vannatta's (2013) conclusion that regression analysis is suitable for studies that include a base of two independent variables and one dependent variable. The study was descriptive because the purpose was to examine the possible relationship. Babbie (2015) argued that identifying correlation does not equate to establishing causation. A correlational study was appropriate for this study because the purpose of the study was the examination of the possible relationships among variables instead of causation as do experimental or quasi-experimental designs. By evaluating the methods and goals of each research methodology and quantitative designs, I determined that the quantitative correlation design was best suited for addressing the research problem.

Population and Sampling

The sample consisted of QSR general managers with a minimum of 6-months of assignments to the specific business units for which the annual turnover rates and OE scores are available. Participants function as the senior operations unit managers of the respective QSR units included in the study. GMs are the senior operations managers in QSRs. The participants represent a purposive selection from among the 83 QSR GMs at

the participating franchise Brand X organizations operating in the South East United States. Brand X is one of the largest QSR brands and the organizations included in the study operate approximately 83 QSRs within the Southeastern U.S. market. An a priori power analysis, *F* test-linear multiple regression: fixed model, R^2 deviation from zero statistical test, using G*Power version 3.1.9.2 software, and two predictor variables was conducted to determine the appropriate sample size for the study. Effect size convention in multiple regression analysis *F*-test lists effect sizes of .02, .15, and .35 as the standard representing small, medium, and large effects (Institute for Digital Research and Education, n.d.).

The calculation of statistical sample sizes are completed using G*Power statistical software (Faul, Erdfelder, Buchner, & Lang, 2009). The figure in Appendix C represents the results from the a priori power analysis, assuming a medium effect size (f = .15), α = .05, indicated that a minimum sample size of 68 participants was required to achieve a power of .80. For the same effect size and alpha values, increasing the sample size to 107 would have increased the power of the study to .95. The sample size of 107 is larger than the population of 83 GMs at the companies in the study. Therefore, the objective was to include 68 participants in the study. Using medium effect size, a sample size of 68 for power at .80 was required for the study.

An analysis of 22 turnover rates-related articles, including Boyatzis (2014), DeConninck (2014), and Wan, Downey, and Stough (2014), revealed the use of a medium effect size in the development of the research parameters. Therefore, using a medium effect size in the current study was appropriate and supported in existing

literature. According to Daniel (2012), probabilistic sampling promotes equal opportunity selection across a designated population and promotes the ability for generalization. Conversely, purposive sampling includes the use of criteria as the basis for selection, has inclusion and exclusion components, selection requirement(s), and a possible snowball component. The requirement for participants' assignment to a particular business unit for the period associated with the available and associating OE scores and turnover data supported the use of purposive sampling.

Brand X QSR GMs have senior restaurant managerial accountability and according to Chughtai (2015), influence the organizational effectiveness. Managers influence employees' job satisfaction (Meisler, 2014), employees' commitment (Cheng, Jiang, Cheng, Riley, & Jen, 2015), and employee-customer relationship (Liden, Wayne, Liao, & Meuser, 2014). Therefore, using the purposive sampling method for participants aligned with the purpose and the variables in the study. Using a purposive sampling method is valid in populations with unique and definable characteristics (Bristowe, Selman, & Murtagh, 2015; Teddlie & Yu, 2007). The purposive sampling method was suitable for the study because of the need to align GMs' EI and OE scores with employee turnover rates in specific restaurants. Singleton and Straits (2010) argued that nonprobability sampling excludes segments of the population and limits the generalizability of the findings. The use of selection criteria and purposive sampling method limits the generalizability of the findings. The convenience sampling method includes the participants selections based on availability (Daniel, 2012) and does not support the selection criteria for this study. GMs from QSR Brand X, who have served

for a minimum of 6-months as the senior restaurant manager, were eligible to participate in the study.

Two common weaknesses in nonprobability sampling include the inability to predict variability and researcher's bias based on the selective exclusion of a segment of the population (Singleton & Straits, 2010). The inclusion criteria for the study precluded the use of random or systematic sampling method. In addition, the population size of 83 general managers combined with the exclusion criteria supported the purposive sampling method to target a sample 68 participants. Purposive sampling was necessary due to the limitations of the inclusion and exclusion criteria and suitable for quantitative studies with the specified research design. The use of purposive selection criteria, a discriminatory sampling method, and Internet-based self-assessment can produce nonresponse bias -failure to participate, unit nonresponse bias -failure to respond, and item nonresponse bias -incomplete responses (Daniel, 2012). Future turnover rates or reassignment of GM's might affect the ability to replicate the study in the same sample.

Ethical Research

By adhering to the Walden University Institutional Review Board (IRB) established research procedures, I ensured the ethical protection of the research participants. Institutional Review Boards examine and approve academic research involving human participants based on the guidelines of the Belmont Report (Fiske & Hauser, 2014). Guidelines for conducting ethical research include respect for persons, beneficence, and justice (Belmont Report, 1979; Cox et al., 2014). There are four inherent ethical requirements in research that involve human participants (Singleton &

Straits, 2010). The four ethical issues that researchers must consider and address are the possible harm to participants, need for informed consent, deception, and issues of privacy (Howell et al., 2015; Singleton & Straits, 2010).

I completed the National Institutes of Health's (NIH) course "Protecting Human Research Participants" the guidelines within the Belmont Report. The three principal ethical guidelines in the Belmont Report are; respect for persons, beneficence, and justice (Belmont Report, 1979). According to Davidson (2012), it is important to protect human participants from unethical researchers. Therefore, the introductory letter included the Internal Review Board's (IRB) approval number, 01-06-17-0472413, for the study, an explanation detailing the nature and background of the study, and a description of how participant information will remain confidential. The document emphasized that participation was voluntary and that participants retained the right to withdraw from the study at any time. In addition, participants retained the right to accept or decline to participate without penalty or discrimination.

The study included no physical risks to the participants, and the psychological, economic, and professional risks were minimal. Participation was voluntary and solicited from a population for which I have no previous contact, direct relationship, or professional influence. I have a peer-level association with the district level operation directors of the organizations in the study. Therefore, I solicited their participation by asking them to provide access to unit general managers, who met the inclusion criteria of the study and who might be willing to participate in the study. A multiunit operator or company representative identify potential participants using the research inclusion

criteria for GMs with a minimum of 6-months assignment to a particular restaurant for which turnover and OE data are available.

The risk to the participants was minimal and restricted to the association with responses to the online assessment. I coded the data to protect participants' identities using P1, P2, P3 …P69 respectively. Coding the EI results using P1 through P69 serve as replacements for participants' identifying information. In addition , using the code ensured proper association of EQ-i 2.0 assessment data to the corresponding OE scores and the employee turnover data. Participant data included no identifying information, and I will store the data on a removable drive that is separate from my personal computer.

All raw data are confidential, and participants received information about confidentiality on the consent form. After the completion of the study, all information relating to the study will be stored in a safe at my home for 5-years. After the 5-years storage time, the data will be destroyed. I adhered to the Walden University guidelines and practices governing acceptable research standards in compliance with the Federal guidelines.

After receiving the approval of the Institutional Review Board, I contacted the multiunit managers via telephone and email and solicited their help to find potential participants, and then I sent an email with an open invitation link to the EQ-i 2.0 that they forwarded to the potential participants. The invitation requested that the participants complete the online EQ-i 2.0 self-rating assessment via the Multi-Health Systems, Inc. (MHS) Scoring Organizer website. I understand that GMs have competing professional responsibilities and that participating in a study might be an interruption of work.

Therefore, I followed up by calling each multiunit manager to encourage them to share the open invitation link with the potential participants. I solicited participation by explaining that participation was voluntary, reinforcing that participants could withdraw at any time without adverse effect, and confirmed that they have access to my contact information and the information for my supervisor. The participants provided consent and acknowledgment of understanding (U.S. Department of Health and Human Services, 2009) by selecting the embedded link in the consent email and by completing the survey. According to Fiske and Hauser (2014), research that poses no-greater-than minimal-risk might still need to ensure the protection of participants' identities.

I protected the confidentiality and anonymity of all research participants and companies by removing all identifiers from the data. I am the only person with access to the participants' data. Limiting access to research data and storing written data in a locked filing cabinet is a simple and effective way to protect the integrity of the resource (Clinical Tools Inc., 2006). A list of the companies that agreed to participate and provisional permission to collect and use data is being stored on a removable drive and locked in a safe at my home for 5 years.

Participants received no monetary incentive for participating in the study. MHS provided individualized research-related EI assessment in the dataset at a cost of $6.00 each. I paid for the data. The representatives of the participating organizations have access to the conclusions of the published research. There are no participants' and organizational identifiers in the document. Therefore, all participants and organizations' information in the final study will remain confidential and anonymous to the public.

Data Collection Instruments

Instrumentations

Cost, intention, accessibility, and validity and reliability of the instrument are important factors in the selection of assessment instruments. According to Choi and Kluemper (2012), research context and method are important in determining the applicability of the instrument. The EQ-i 2.0 is a valid and reliable assessment instrument for use in corporate, educational, clinical, medical, research, and preventative settings (Mishar & Bangun, 2014). The reliability of the EQ-i 2.0 has been established (Dawda & Hart, 2000; Weerdt & Rossi, 2012). According to MHS, the normative sample of the EQ-i 2.0 consists of data from all 50 U.S. states and ten Canadian provinces. Furthermore, the normative sample includes racial/ethnic, education level, and geographic distribution that aligns within 4% of Census target. Therefore, it is representative of the North American general population. According to the EQ-i 2.0 literature, the sample includes 200 men and 200 women in each of the following age groups: 18-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65+. The EQ-i 2.0 is ideal for use in a population of age range 18 years and older and requires 20-30 minutes of administration time (MHS, n.d.)

In addition, the criterion validity of the EQ-i demonstrates that EI could accurately discriminate between successful and unsuccessful people in business and industry settings (Mishar & Bangun, 2014). The EQ-i 2.0 assessment instrument measures five constructs through fifteen subscales of EI (Bar-On, 2006b). The EQ-i 2.0 is a traits-based measure of EI (Di Fabio & Saklofske, 2014). Trait EI captures the skill sets relating to awareness, understanding, regulating, and ability to express emotions in self

and interpersonal relationships (Brady et al., 2014). The result of the EQ-i 2.0 self-assessment instrument produces one overarching EI score that includes five composite scores and 15 subscales in a 1-5-15 factor structure and is consistent with the Bar-On (1997) model of EI (MHS). Participants will respond to 133 questions using a five-point Likert-type scale by selecting 1 (*never/rarely)*, 2 (*occasionally*), 3 (*sometimes*), 4 (*often*), and 5 (*always/almost always*).

The results of the EQ-i 2.0 assessment produces composite and subscale scores on an interval scale of measurement that ranks EI scores on a graph ranging from a score of 70 to 130. Assessment scores occurring between 70-90 fall within the low-range, 90 -110 fall within the mid-range, and 110-130 within the high-range as computed by the EQ-i 2.0 assessment. Dividing the curve into quartiles produces 10-point cut-off statistical references (low range < 90, mid-range 90-110, and high range > 110) is illustrated in the EQ-i 2.0 profile graph. The distributions of norm group scores reflect 25% of the respondents scoring below 90, 50% scoring between 90-110, and 25% scoring above 110 (MHS, 2011). The EQ-i 2.0 is suitable for applications related to leadership and organizational development, selection, executive coaching, team building, and student development (MHS, nd.). In addition, the instrument, which includes 133 items, is administered and scored online, and requires North American B level qualification or EQ-i 2.0 certification. I completed the requisite EQ-i 2.0 and EQ360 certification workshop to earn my certification (see Appendix B) and qualify to administer and coach EI development for non-clinical purposes.

MHS provided results for the EQ-i 2.0 assessments that were calculated using raw scores with an average mean of 100 and a standard deviation (*SD*) of 15. The scores were adjusted in comparison to the scores of the sample population (MHS). Data points far away from the mean have large *SD* and data points in a tight cluster around the mean have a small *SD*. The five constructs are intrapersonal, interpersonal, stress management, adaptability, and general mood. The subscales in intrapersonal relationship are self-regard, emotional self-awareness, assertiveness, independence, and self-actualization. The subscales in interpersonal relationship are empathy, social responsibility, and interpersonal relationship. Stress management includes two subscales –stress tolerance and impulse control. Adaptability includes reality testing, flexibility, and problem-solving. General mood includes optimism and happiness subscales.

The intrapersonal scale measures self-awareness and self-expression. The interpersonal scale measures social awareness and interpersonal relationships. Stress management scale assesses emotional management and regulation; adaptability measures change management, and general mood measures self-motivation (Bar-On, 2006a). MHS (n.d.) provides the following definitions for subscales in the EQ-i 2.0 EI competencies:

Intrapersonal Self-Awareness and Self-Expression

- Self-regard - accurately perceive, understand, and accept self
- Emotional self-awareness - be aware of and understand one's emotions
- Assertiveness -effectively and constructively express one's emotions and oneself
- Independence - be self-reliant and free of emotional dependency on others

- Self-actualization -strive to achieve personal goals and actualize one's potential (MHS, (n.d.).

Interpersonal Social Awareness and Interpersonal Relationship

- Empathy -be aware of and understand how others feel
- Social responsibility -identify with one's social group and cooperate with others
- Interpersonal relationship -establishes mutually satisfying relationships and relate well with others (MHS, n.d.)

Stress Management Emotional Management and Regulation

- Stress tolerance -effectively and constructively manage emotions
- Impulse control -effectively and constructively control emotions (MHS, n.d.).

Adaptability Change Management

- Reality-testing -objectively validate one's feelings and thinking with external reality
- Flexibility -adapt and adjust one's feelings and thinking to new situations
- Problem-solving -effectively solve problems of a personal and interpersonal nature (MHS, n.d.).

General Mood Self-Motivation

- Optimism -be positive and look at the brighter side of life
- Happiness -feel content with oneself, others and life in general (MHS, n.d.).

Bar-On's (1997) concept of EI addresses the broad set of interrelated personal, emotional, and social skills that define the individual ability to survive, cope, and succeed

in a dynamic environment (Weerdt & Rossi, 2012). MHS (2011) described the EQ-i 2.0 model of EI as producing an overarching EI score as the composite assessment of the five constructs and the 15 subscales. According to MHS (n.d.), the norm group of 4000 people, who completed the EQ-i 2.0 in 2010, serves as the general population in the assessments. The distribution of results for the norm group assessments resembles a normal curve. Therefore, reliable inferences are possible from EQ-i 2.0 assessments.

Partial eta-squared (η^2) is suitable for summarizing multiple categories or non-linear relationships (Cohen, 2013). In addition, η^2 values of .01, .06, and .14 represent small, medium, and large interaction effects among variables. The partial η^2 values of the normative sample included N = 419 Black, N = 433 Hispanic/Latino, and N = 2831 Whites participants ranged from .01-.03. Therefore, the race/ethnicity difference in the EQ-i 2.0 instrument is small. Table 1 is a summary of the EQ-i 2.0 scores by racial/ethnic group in the normative sample.

Table 1

EQ-i 2.0 Scores by Racial/Ethnic Group in the Normative Sample

Scale		Black	Hispanic/ Latino	White	*F* (2, 3680)	Partial η2
Total EI	*M*	105.7	104.3	98.8	57.68	.03
	SD	14.7	14.9	14.7		
Self-perception composite	*M*	106.0	104.6	98.5	68.81	.04
	SD	14.7	15.0	14.8		
Self-regard	*M*	105.8	104.5	98.5	65.81	.03
	SD	14.6	14.9	14.7		
Self-actualization	*M*	104.8	104.2	98.7	49.28	.03
	SD	14.7	14.9	14.7		
Emotional self-awareness	*M*	104.4	102.8	99.1	30.48	.02
	SD	14.8	15.1	14.9		
Self-expression composite	*M*	105.9	104.0	98.9	55.51	.03
	SD	14.8	15.0	14.8		
Emotional expression	*M*	102.8	103.0	99.3	18.30	.01
	SD	14.8	15.1	14.9		
Assertiveness	*M*	104.7	103.3	99.0	36.59	.02
	SD	14.8	15.1	14.9		
Independence	*M*	106.5	103.1	99.0	57.08	.03
	SD	14.5	14.7	14.5		
Interpersonal composite	*M*	103.3	103.7	99.2	27.17	.01
	SD	14.7	14.9	14.7		
Interpersonal relationships	*M*	103.8	104.0	99.2	32.03	.02
	SD	14.8	15.0	14.8		
Empathy	*M*	101.4	102.2	99.6	7.53	.00
	SD	14.5	14.8	14.6		
Social responsibility	*M*	103.3	103.2	99.0	26.25	.01
	SD	14.7	14.9	14.7		
Decision making composite	*M*	105.2	102.2	99.3	32.32	.02
	SD	14.6	14.9	14.7		
Problem solving	*M*	104.4	101.9	99.5	23.44	.01
	SD	14.5	14.7	14.5		
Reality testing	*M*	104.0	102.5	99.3	24.29	.01
	SD	14.8	15.1	14.9		
Impulse control	*M*	103.7	100.8	99.7	13.42	.01
	SD	14.9	15.2	15.0		
Stress management composite	*M*	104.1	103.9	99.0	36.11	.02
	SD	14.8	15.0	14.8		
Flexibility	*M*	103.8	103.4	99.1	28.07	.02
	SD	15.0	15.2	15.0		
Stress tolerance	*M*	102.9	102.6	99.4	17.36	.01
	SD	14.6	14.8	14.6		
Optimism	*M*	103.5	103.7	99.1	29.30	.02
	SD	14.8	15.1	14.9		
Happiness	*M*	101.6	104.4	99.2	23.92	.01
	SD	14.9	15.2	15.0		

Note. Adapted *from Emotional Quotient Inventory 2.0 (EQ-i 2.0) User's Handbook* by Multi-Health Systems, Inc. 2011. Toronto, ON: MHS, p.184. Copyright 2011 by Multi-Health Systems, Inc. Reprinted with permission (see Appendix D). Samples sizes vary due to missing data: Black, N = 419, Hispanic/Latino, N = 433, White, N = 2,831–2,834. All F-test values significant at $p < .001$. Guidelines for evaluating partial η2 are .01 = small; .06 = medium; .14 = large.

The EQ-i 2.0 instrument identifies invalid and random responses by calculating an Inconsistency Index (IncX) for respondents. The IncX is compared to the mean and standard deviation of the normative sample. Table 2 provides a summary of the descriptive statistics for the normative sample.

Table 2

Frequencies and Descriptive Statistics of Inconsistency Index Scores in EQ-i 2.0 Normative and Random Samples

	Normative sample		Random sample	
Inconsistency index score	*N*	%	*N*	%
10	0	0.0	1	0.0
9 or higher	0	0.0	28	0.7
8 or higher	1	0.0	152	3.8
7 or higher	3	0.1	543	13.6
6 or higher	5	0.1	1,293	32.3
5 or higher	23	0.6	2,287	57.2
4 or higher	60	1.5	3,172	79.3
3 or higher	140	3.5	3,733	93.3
2 or higher	455	11.4	3,939	98.5
1 or higher	1,449	36.2	3,994	99.9
0 or higher	4,000	100.0	4,000	100.0
M (SD)	0.5 (0.9)		4.8 (1.6)	
Cohen's *d*		3.36		

Note. From *Emotional Quotient Inventory 2.0 (EQ-i 2.0) User's Handbook* by Multi-Health Systems, Inc. 2011. Toronto, ON: MHS, p.185. Copyright 2011 by Multi-Health Systems, Inc. Reprinted with permission (see Appendix D).
An IncX score of 3 is used to indicate a potentially inconsistent response style. Positive Cohen's *d* values represent higher means in the random sample. Guidelines for evaluating |*d*| are .20 = small, .50 = medium, .80 = large.

An EQ-i 2.0 result including an IncX score of 3 indicates potentially inconsistent participant's response, and positive Cohen's *d* value reflects a sample with a mean that is higher than the value in the norm group. Cohen's *d* illustrates the variance between standard deviations of the research sample versus the EQ-i 2.0 normative sample.

Accordingly, marker values of .20, .50, and .80 represent small, medium, and large effects respectively (Cohen, 2013).

The validity of the EQ-i 2.0 in the measurement of EI for corporate leaders is supported by the Cohen's $d \geq .20$ values in the comparison of total EI score, composite scales, and subscales relative to the normative sample. Table 3 is a summary of the EQ-i 2.0 scores for corporate leaders in the normative sample. Correlation coefficients (r) of .10, .30, and .50 reflect small, medium, and large effects respectively.

Table 3

EQ-i 2.0 Scores in Corporate Leaders

Scale		Corporate leaders	Cohen's *d* (Relative to norms)
Total EI	*M*	112.2	0.82
	SD	11.7	
Self-perception composite	*M*	111.4	0.77
	SD	11.4	
Self-regard	*M*	108.3	0.56
	SD	10.8	
Self-actualization	*M*	113.1	0.88
	SD	10.4	
Emotional self-awareness	*M*	107.0	0.47
	SD	14.7	
Self-expression composite	*M*	110.8	0.73
	SD	11.4	
Emotional expression	*M*	107.5	0.50
	SD	12.9	
Assertiveness	*M*	109.5	0.64
	SD	12.0	
Independence	*M*	108.4	0.57
	SD	11.6	
Interpersonal composite	*M*	109.2	0.62
	SD	11.8	
Interpersonal relationships	*M*	108.3	0.56
	SD	10.9	
Empathy	*M*	106.2	0.41
	SD	13.6	
Social responsibility	*M*	109.6	0.64
	SD	12.4	
Decision making composite	*M*	109.6	0.64
	SD	13.0	
Problem solving	*M*	109.3	0.63
	SD	12.4	
Reality testing	*M*	109.0	0.60
	SD	12.4	
Impulse control	*M*	104.2	0.28
	SD	14.0	
Stress management composite	*M*	111.1	0.75
	SD	12.7	
Flexibility	*M*	107.4	0.49
	SD	13.4	
Stress tolerance	*M*	110.5	0.70
	SD	13.2	
Optimism	*M*	109.5	0.64
	SD	11.5	
Happiness	*M*	106.9	0.46

Note. From *Emotional Quotient Inventory 2.0 (EQ-i 2.0) User's Handbook* by Multi-Health Systems, Inc. 2011. Toronto, ON: MHS, p.180. Copyright 2011 by Multi-Health Systems, Inc. Reprinted with permission (see Appendix D). Positive Cohen's *d* values represent higher mean scores in corporate leaders. Guidelines for evaluating |*d*| are .20 = small, .50 = medium, .80 = large

The purpose of internal consistency is to examine the degree of association between survey instrument items (Dunn, Baguley, & Brunsden, 2014) and is usually represented using Cronbach's alpha (Cronbach, 1951). According to MHS (n.d.), a set of items producing high levels of internal consistency suggests a single, cohesive construct. The EQ-i 2.0 assessment instrument produces an alpha value of .97 for the total EI scale, .88 to .93 for the composite scales, and alpha values equal and higher than .77 for all subscales (MHS). In addition, the values were similar across normative groups including classification by age and gender. Therefore, the high level of internal consistency found in the EQ-i 2.0 Total EI score supports the notion that the EQ-i 2.0 instrument is a reliable measure of EI. According to the EQ-i 2.0 User Manual, a 90% confidence interval for participants scoring 105 on the assessment has a margin of error at ± 4 points and will have a raw score ranging from 101 to 109.

The EQ-i 2.0 User Handbook lists the following test-retest data for 204 individuals evaluated over periods ranging from 2- to 4-weeks apart (mean interval = 18.41 days, *SD* = 3.22 days) and for 104 individuals evaluated 8-weeks apart (mean interval = 56.80 days, *SD* = 1.25 days). The EQ-i 2.0 produced high correlations between each sample. Total EI score in both the 2- to 4-week r = .92 and 8-week samples r = .81. In addition, test-retest correlations for the composite scales demonstrated scores ranging from r = .86 (self-expression composite) to r = .91 (interpersonal composite) in the 2- to 4-week sample, and from r = .76 (interpersonal composite) to r = .83 (decision making composite) in the 8-week sample. Subscale results produced scores ranging from r = .78 (impulse control) to r = .89 (empathy) in the 2-4-week sample and from r = .70

(flexibility) to r = .84 (self-regard, happiness) in the 8-week sample. The results from the revised EQ-i 2.0 are consistent with the results of the original Bar-On (2004) EQ-i assessment instrument. According to MHS (n.d.), The EQ-i 2.0 produces stable results with small variances between the standard scores of less than 1 *SD* between the Time 1 and Time 2 samples.

The EQ-i is an established tool for measuring socio-emotional abilities and correlates well with other instruments used in measuring related concepts (Lepage et al., 2014). The results of multiple studies document the validity of the EQ-i 2.0 instrument as a measurement of the Bar-On EI constructs. Data from the Spanish version of the EQ-i confirmed the internal consistency and five-factor EI structure of the EQ-i model with reliability measures from .63 to .80 (Ferrándiz et al., 2012). The EQ-i:YV demonstrated statistically significant correlation and acceptable kurtosis and asymmetry thereby justifying model fit (Fuentes, Linares, Rubio, & Jurado, 2014). According to Brady et al. (2014), the inconsistency scales and the impression indexes of the EQ-i identifies values within the range of acceptability and screen for social desirability response style. According to MHS, the appropriateness of the scale structure demonstrates the validity of the instrument. The scale structure includes the Positive and Negative Impression scales and IncX and its consistent performance as compared to the normative sample and data set of EQ-i 2.0 item responses.

The theoretical based subscales of the Bar-On EI model have been validated using exploratory factor analyses (EFA) (MHS, n.d.). In addition, the ability to replicate the theoretical factor structure and the results of the EFA were determined using

confirmatory factor analyses (CFA). Based on the results of the EFA and CFA, the EQ-i 2.0 measures the fifteen factors from the EQ-i 2.0 items within the predefined grouping as outlined by the theoretical model of the Bar-On EI model. The CFA produced RMSEA values below .10 and above .90 for the remaining fit indices thereby, supporting the outlined 1-5-15 structure of the EQ-i 2.0 model and EFA results. The majority of the subscales within the EQ-i 2.0 instrument demonstrated a medium effect size. The effect size of the subscales ranged from $r = .27$ to $r = .70$. Therefore, the EQ-i 2.0 is a reliable and valid measure of the specified EI construct as depicted by the 1-5-15 structure and no adjustments or revisions to the instrument will be necessary. Table 4 contains summaries of the standardization, reliability, and validity results for the correlations among the EQ-i 2.0 subscales.

Table 4

Standardization, Reliability, and Validity Tables. Correlations among EQ-i 2.0 Subscales

	Self-perception			Self-expression			Interpersonal			Decision making			Stress management			
Subscale	SR	SA	ES	EE	AS	IN	IR	EM	RE	PS	RT	IC	FL	ST	OP	HA
SR. Self-regard	–															
SA. Self-ctualization	.70	–														
ES. Emotional self-awareness	.43	.55	–													
EE. Emotional expression	.51	.47	.46	–												
AS. Assertiveness	.52	.57	.45	.43	–											
IN. Independence	.56	.47	.24	.33	.47	–										
IR. Interpersonal Relationships	.56	.62	.52	.59	.46	.31	–									
EM. Empathy	.29	.45	.64	.42	.30	.10	.61	–								
RE. Social responsibility	.47	.67	.47	.42	.41	.27	.61	.55	–							
PS. Problem solving	.60	.54	.32	.42	.45	.73	.38	.20	.34	–						
RT. Reality testing	.55	.69	.76	.40	.55	.40	.55	.58	.53	.48	–					
IC. Impulse control	.30	.24	.20	.18	.12	.41	.15	.19	.19	.51	.27	–				
FL. Flexibility	.47	.44	.26	.48	.26	.50	.43	.27	.37	.60	.32	.39	–			
ST. Stress tolerance	.59	.65	.42	.34	.49	.56	.46	.32	.46	.67	.61	.33	.50	–		
OP. Optimism	.73	.69	.48	.47	.39	.36	.61	.48	.57	.49	.56	.26	.48	.58	–	
HA. Happiness	.81	.68	.43	.53	.40	.40	.60	.38	.52	.49	.52	.24	.47	.51	.81	–

Note. From Emotional Quotient Inventory 2.0 (EQ-i 2.0) User's Handbook by Multi-Health Systems, Inc. 2011. Toronto, ON: MHS, p.171. Copyright 2011 by Multi-Health Systems, Inc. Reprinted with permission (see Appendix D). N = 4,000. All correlations significant at $p < .01$. Guidelines for evaluating r are .10 = small, .30 = medium, .50 = large

Interpreting the Total EI and the Composite Scale Scores

After validating the EQ-i 2.0 profile for each participant, examining the Total EI scores and the Five Composite Scale score provided a summary of participants' emotional and social functioning. The Total EI score is a general indication of each participant's level of EI. The overall EI score is calculated by summing 118 of the 133 items on the assessment (excluding the items on the PI, NI, and Happiness scales, and item 133). The overall EI score summarized each participant's ability to perceive and express self, develop and maintain social relationships, cope with challenges, and use

emotional information effectively and meaningfully. According to MHS, the Total EI score potentially masks subscales scores that demonstrate high or low function. Therefore, an analysis of the five composite scales of the EQ-i 2.0 in a grouping of the 15 subscales is possible. The EQ-i 2.0 profile graph list the composite subscales as self-perception (SP), self-expression (SE), Interpersonal (IP), decision-making (DM), and stress management (SM).

The subscale levels of the EQ-i 2.0 provide participants' with targeted skill-related data and could serve as the basis for personal and professional EI development. The Bar-On EQ-i is one of the first valid and reliable instruments for measuring success potential (Weerdt & Rossi, 2012). A possible correlation between the EI of QSR managers and turnover rates might provide decision-makers with a tool for improving QSR operational success.The EQ-i 2.0 is, therefore, a valid and reliable instrument for use in my study (High Performing Systems, 2012).

Data Collection Technique

Using the self-administered online assessment instrument was a cost effective and convenient method for collecting data from participants who are located across a large geographical area within the South East United States. HR personnel at the participating QSR companies calculate and track OE and turnover rate data annually as a measure of standard QSR operations. Using current OE and turnover rate data from the specific restaurant and GM reduced the cost of data collection and was ideal for convenient structured record review. Therefore, collecting EI data using the EQ-i 2.0 online self-assessment instrument and reviewing the annualized OE and turnover rate data from the

participating QSR organizations was cost effective, convenient, and efficient in the completion of the study.

Participants accessed the EQ-i 2.0 online self-assessment questionnaire by following an embedded link in a personalized email invitation from mhsnoreply.com (MHS, 2011). I sent an open invitation to the participating organizations via MHS Assessment portal where I entered the organization contact information, and attach the consent form. The open link invitation was shared with the participants. Each participant received an invitation describing the EI concept and inviting participation in completing the online EQ-i 2.0 self-assessment. The invitation included information about the purpose of collecting the data, estimated time for completing the assessment, my contact details, description of participants' rights to withdraw at any time, consent by participating details, and statement of confidentiality. The EQ-i 2.0 self-assessment instrument resides on a secure server of Multi-Health Services, Inc. (MHS, n.d.). By registering and completing the EQ-i 2.0 and EQ 360 certification program, I have a secured personalized talent assessment portal for processing and storing EI assessment data. I purchased the scored datasets for each participant from the MHS Assessment portal at a student discount rate of $6.00 per dataset.

The EQ-i 2.0 is an online self-assessment instrument, which includes 133 questions, requiring participants to respond by selecting choices on a five-point Likert-type scale. The assessment required approximately 15-30 minutes of uninterrupted time for completion. I received notification of assessment completion from the MHS server, and I accessed the results by logging in to the secure portal at MHS.com.

I chose the scored dataset option within the MHS online portal to purchase and process the EI data for the participants, enter the name of the dataset, select the US/Canada norm region, and choose the norm type as general. I retrieved the Excel dataset from the My Scored Dataset link that was available with system receipt. After selecting the My Scored Dataset hyperlink, a Download Dataset option was available. I saved the dataset on a removable storage drive that I will store in a secure safe for 5-years. I deleted the scored assessments dataset from the assessment portal. After 5-years, I will destroy the storage drive.

I examined the data for consistency and accuracy according to the Bar-On EQ-i 2.0 technical standards. According to Weerdt and Rossi (2012), EQ-i 2.0 completed surveys with inconsistency indexes greater than 12, omission rates above 6%, and scores of 130 and higher on the positive and negative impression scales are invalid. There were no invalid EQ-i 2.0 participant data. I extracted the scores for GMs' total EI from column AC within the Excel dataset spreadsheet, and transferred the information to my PC. I coded the EI data and validated that there were no identifying details, and created a spreadsheet containing the EI scores, OE scores, and turnover rates data. I analyzed the results using IBM SPSS version 21 software.

Data Analysis

In this heading, I include the research question, sub-research questions, and hypotheses for examining the possible relationship between GMs' EI, OE scores, and turnover rates in at three companies at Brand X QSR. The central research questions for this study was: What is the relationship between general managers' emotional

intelligence, operational evaluation scores, and employee turnover rates in quick service restaurants?

The following research subquestions aligned with each hypothesis:

RQ1: What is the relationship between general managers' EI and employee turnover rates in quick service restaurants?

RQ2: What is the relationship between OE scores and employee turnover rates in quick service restaurants?

Hypotheses

Testing the following hypotheses provided a framework enabled answering of the research question and subquestions:

H_0: There is no significant correlation between general managers' EI, OE scores, and employee turnover rates in QSRs.

H_a: There is a significant correlation between general managers' EI, OE scores, and employee turnover rates in QSRs.

The correlational design is suitable for the investigation of possible relationships and the significance of the association between two or more quantitative variables (Mertler & Vannatta, 2013). Also, multiple regression analysis is suitable for use in correlational studies with two independent variables and one dependent variable. The EQ-i 2.0 instrument produces results with interval scale of measure and is appropriate for nonexperimental studies with the random-effect model. OE scores are interval scales of measure with 10-point intervals identifying the quality of operations. OE scores lower than 70% represent *F-level* operations, 70% - 79% represent *C-level* operations, 80% -

89% represent *B-level* operations, and 90% - 100% represent *A-level* operations. The scale of measure for turnover rates is ratio and includes a possible absolute value of 0%.

Kleinbaum et al. (2013) argued that regression analysis is suitable for examining the possible relationship and influence among variables. I examined the possible relationships between the predictor and criterion using IBM SPSS version 21 software to complete multiple linear regression analysis. According to Green and Salkind (2013), studies with nonexperimental design are ideally suited for multiple regression analysis. The fixed-effect model assumptions are the dependent variable adheres to a normal distribution in the population, the scores of the dependent variable are homoscedastic for all values of the predictor variables, and the cases are independent random samples from the population (Green & Salkind, 2013).

Testing Hypothesis 1 and Hypothesis 2 using multiple regression analysis examined the overall effect of the predictor variables on the dependent variable (Cohen, Cohen, West, & Aiken, 2013). Examining the relationships between the variable using partial correlations provided clarity regarding the possible effects of individual predictors in the statistical relationship (Kenett, Huang, Vodenska, Havlin, & Stanley, 2015). The SPSS software application was suitable for testing the assumptions that support linear regression analysis using variables on ratio and interval scales. According to Pallant (2013), using partial correlations eliminates the effect of any confounding variables and allows the analysis of the direct relationship between two variables of interest. Partial correlation measures the effect size and indicates the linear relationship between two variables (Green& Salkind, 2013).

According to Green and Salkind (2013), SPSS is suitable for use in assessing the influence of the independent or predictor variables on the dependent variable. In addition, partial correlations are effective in assessing the relative impact of the individual predictors in the relationship between the variables. The underlying assumption in the significance test for a partial correlation coefficient is the variables adhere to a multivariate normally distribution. Confirming multivariate normality among the variables assured the reliability of analysis results (Korkmaz, Goksuluk, & Zararsiz, 2014). Producing scatterplots of the independent and dependent variables provided visual representations for assessing the normality relationship between the variables to identify if a nonlinear relationship exists (Kenett, Huang, Vodenska, Havlin, & Stanley, 2015).

Validating multivariate normality before completing parametric analysis is important (Korkmaz, Goksuluk, & Zararsiz, 2014). Completing analyses in SPSS identified the level of significance and examined the normality of distribution among the variables. Researchers use histograms to display the distribution of the scores for a single variable (Pallant, 2013). Therefore, visual examination of a histogram for each variable with normal curve plot in SPSS identified whether there were skewness or kurtosis issues (Field, 2013). Partial correlations can range in values from - 1 representing an inverse relationship, 0 representing no relationship, to + 1 representing positively correlated relationship; between the independent and dependent variables (Green & Salkind, 2013). In addition, dividing .05 by the number of computed correlations and establishing a corrected significance level was useful for achieving a predefined Type I error (incorrectly rejecting the null hypotheses). Values for *p* less than the adjusted

significance level indicate significance in the relationship between the independent and dependent variables.

According to Hemphill (2003), Cohen (1988) provided valid guidelines concerning correlation coefficients. Correlation coefficients of less than .15 represent the lower quartile, those in the .15 to .35 range represent the middle half, and those above .35 represent the upper quartile (Hemphill, 2003). Employing multiple linear regression analysis provides a measurable value for the goodness of fit relationships variables. The coefficient of determination (R^2) explains the level and associated changes that are occurring simultaneously in the variables (Cohen, 2013).

Testing and Addressing Violations of Parametric Assumptions

The analysis of data using linear regression analysis includes testing the assumption of linearity, normality, homoscedasticity, and the absence of multivariate outliers. The linearity in the model is verifiable by plotting, the dependent variable versus each independent variable, and determining whether there is the symmetrical distribution of the points around a diagonal line. I used a scatter plot to provide a visual representation of the relationship among the dependent and independent variables. If the pattern of distribution in the points produced a pattern of bowing, there would be the potential for systematic errors within the model at extreme predictions.

Heteroscedasticity would have been evident by bowing or fan shape in the scattering of residual points (Berry & Feldman, 1985). According to Berry and Feldman (1985), significant heteroscedasticity weakens the effectiveness of the argument in the model. A small amount of heteroscedasticity has minimal effect on the significance test

(Tabachnick & Fidell, 2014). Plots that include a pattern of bowing might be indicative of the potential for systematic errors within the model at extreme predictions. I constructed normal probability plots of the residual or the data of the dependent and independent variables to identify the pattern of distribution of the points to test the normality assumption.

Violation of the multivariate normality assumption requires cleaning the data (Osborne, 2010) by computing a new variable using the SPSS *Transform* function. Using SPSS log transformation (log (X_i)) function correct issues of positive skew and unequal variances (Field, 2013). However, using bootstrapping in SPSS would have addressed any questions about the reliability of parametric estimates resulting from questionable assumption such as a regression model with heteroscedastic residual fit to small samples (Thai, Mentre, Holford, Veyrat-Follet, & Comets, 2014). Bootstrapping produces random samples with replacement from the original sample, creates alternate dataset of the original population from the original dataset, reduce the impact of outliers, and produce a stabilized version of the model.

Whenever the data points for the dependent and independent variable in the scatterplot fall close to the diagonal line, it indicates normal distribution while deviation from the diagonal is indicative of errors (Pallant, 2013) including skewness or kurtosis. As noted in earlier discussion, a small heteroscedasticity has minimal effect on the significance test (Tabachnick & Fidell, 2014). Bowing or fan shape in the scattering of residual data points in the scatterplot are evidence of significant heteroscedasticity and weakens the results of the analysis (Berry & Feldman, 1985). Random distribution of

residual points around the horizontal line of the standardize residuals versus the standardized predicted values plot indicates linearity in the model. Estimating the properties of the sampling distribution from the sample data using SPSS Bootstrapping function, should address the problem of lack of normality in distribution of the plotted variables (Field, 2013). Bootstrapping produce estimates for the parameters of the population by resampling the sample and providing estimated standard errors and confidence intervals of a population parameter such as the mean, median, proportion, odds ratio, correlation coefficient, and regression coefficient (Thai, Mentre, Holford, Veyrat-Follet, & Comets, 2014). A variance inflation factor (VIF) ≥ 10 indicates multicollinearity among the independent variables. Using the *Factor Analysis* procedure to create a new set of uncorrelated independent variables and fit the original independent variable or computing a new variable using the *Transform* function are ways I would have used to address any collinearity issues.

According to Anderson (2013), producing histograms representing the probability distribution of the values of the responses should identify departures from the standard bell curve. Failure to produce the standard bell shape graph is evidence of possible outliers in the data. Generating a box plot to show the distribution of the dataset and the dispersion of data points in comparison to the interquartile range (IQR) identified possible outliers. Outliers were defined as any points below the first quartile (Q_1) or above the third quartile (Q_3). To assess possible outliers, performing the analysis twice, once with the outlier(s) and again without the outlier(s), and then examining both models defined the influence of the outliers within the dataset. According to Field (2013), if

researchers identify possible outlier(s) in the dataset by determining whether the value is within the range of possible score for the variable, and, if so, if maintaining the data point would affect the conclusions. Furthermore, using bootstrapping can reduce the effects of outliers and improve the reliability of the model (Field, 2013).

The multiple regression equation was estimated as $Y_i = b_0 + b_1X_{1i} + b_2X_{2i.}$ I assessed the extent and significance of the overall relationship of the predictors with the dependent variable using the multiple correlation coefficient R^2 and from the ANOVA Table for the regression model. The adjusted coefficient of determination (R^2) defined how well the regression equation explains the relationship between the dependent and independent variables. The type and relative effect of the individual predictors were revealed through the standardized regression coefficients.. The *F* value test in the ANOVA table identified the level of the model's statistical significance. Testing the hypothesis and defining the slope coefficients of the regression equation as a group defined whether to reject or fail to reject the hypothesis. Failure to reject means that none of the variables belong in the regression equation (Anderson, 2013). According to Anderson (2013), the relationships among the dependent and independent variables can be explained by the estimated regression equation when R^2 is close or equal to 1 ($0 \leq R^2 \leq 1$).

Completing the *F* test and determining if all slope coefficients equal 0 explain whether the regression equation reliably defines the relationship of the independent variables and the dependent variable. The applicable null hypothesis for the *F* test in the current study with two independent variables is H_0: ß$_1$ = ß$_2$ = 0 and proceeding with the

regression equation is dependent on rejecting the null hypothesis. Slope coefficients with values other than 0 explain the significance and nature of the variables' relationships with the dependent variable.

I chose a level of significance ($\alpha = 0.05$) for testing the significance of the multiple regression. A p-value less than .05 would have resulted in rejection of the null hypothesis, and accepting the alternative hypothesis:

H_0: There is no significant correlation between general managers' EI, OE scores, and employee turnover rates in QSRs.

H_a: There is a significant correlation between general managers' EI, OE scores, and employee turnover rates in QSRs.

The *t* test for each slope coefficient will define the statistical significance of the individual coefficients.

The calculated R^2 represents the percentage of employee turnover rate variation accounted for by the linear relationship between GMs' EI score and OE scores. Conversely, $100 - R^2$ represents the percentage of variation in employee turnover rate that is unaccounted for in the model. Calculating the difference between R^2 for the linear relationship between GMs' EI and employee turnover rates and OE scores and employee turnover rates identify the percentage of criterion variance accounted for by using two predictors instead of a single predictor in the regression equation.

The *B* weights regression equation is:

$$\text{Employee turnover rate} = B_{\text{GMs' EI}} + B_{\text{OE scores}} + B_{\text{constant}} \quad (1)$$

The predictor equation for the standardized variables will be:

$$Z_{\text{employee turnover rates}} = ßZ_{\text{GMs'EI scores}} + ßZ_{\text{OE scores}} \quad (2)$$

Study Validity

External validity refers to the generalizability of findings to the larger population (Mitchell, 2012). The strategy for selecting participants was nonprobabilistic and purposive, therefore, limiting the external generalizability of the findings. The current study was a nonexperimental design. Therefore, threats to internal validity are not applicable (Dehejia, 2015). However, threats to statistical conclusion validity are important concerns.

Conditions that inflate Type I error rates resulting in the incorrect rejection of the null hypothesis include reliability of the instrument, data assumptions, and sample size. The reliability of the EQ-i 2.0 assessment instrument is established and was discussed in the *Data Analysis Heading*. I estimated the required sample size calculation using an a priori power analysis to determine the requisite sample size. A Type I error is possible regardless of the confidence level (Field, 2013).

According to Garcia-Perez (2012), it is impossible to eliminate the presence of errors in research. However, Type I error rates are controllable using the composite open adaptive sequential test (COAST) rule (Frick, 1998). Applying the COAST rule requires the repeating of statistical tests to achieve results validating the decision to accept or reject the null hypothesis. Frick (1998) recommended collecting data for testing and retesting the hypothesis and if the test yields $p < 0.01$, reject the null hypothesis, if the test yields $p > 0.36$; do not reject the null hypothesis. Performing the bootstrapping

function in SPSS would have addressed issues of violations to modeling and distributional assumptions. (Chernick, 2007) and sample size (Thai, Mentre, Holford, Veyrat-Follet, & Comets, 2014).

Threats to Statistical Conclusion Validity

Threats to statistical conclusion validity are conditions resulting in inflated Type I error and Type II error rates. Type I error rates result in the false conclusion and failure to accept the null hypothesis when it is true. Type II error rates result in the incorrect acceptance of a false hypothesis as true. Resolving Type I error rates issues was discussed in the *Study Validity Heading*. The level of significance for the current study is $\alpha = 0.05$. Therefore, there is a 5% chance of committing a Type I error (Anderson, 2013). According to Spanos (2014), efforts that reduce Type I error probabilities result in increased probabilities of a Type II error. Eliminating the presence of potential statistical conclusion errors in research is impossible (Garcia-Perez, 2012). However, Type I error rates are controllable using the Bootstrapping function in SPSS. Data supporting the null hypothesis produces a large *p*-value and the *p*-value represents the probability of obtaining a statistic supporting the null hypothesis (Murtaugh, 2014). The threshold for significance is 0.05 (Valpine, 2014). According to Spanos (2014), analysis that produce a *p*-value less than 0.05 supports a rejecting the null hypothesis. Evidence of multicollinearity exist in regression models that produce variance inflation factor (VIF) larger than 10 (Pallant, 2013) and can be resolved by eliminating one of the independent variables (Dormann et al., 2013) or by computing a new variable using the SPSS *Transform* function.

Using a sufficient sample size is necessary for assuring the reliability of research findings and reducing Type I and Type II error rates. According to Faul, Erdfelder, Buchner, and Lang (2009), it is satisfactory to use G*Power statistical software to calculate sufficient sample sizes. Therefore, the appropriate sample size for the study was determined using G*Power version 3.1.9.2 software and conducting an a priori power analysis, *F* test-linear multiple regression: fixed model, R^2 deviation from zero statistical test. The results from the a priori power analysis, assuming a medium effect size (f = .15), α = .05, indicated that a minimum sample size of 68 participants is sufficient to achieve a power of .80.

I checked the assumptions before data analysis to assess the validity of the assumptions related to the variables' linearity, absence of outliers, normality, collinearity, and homoscedasticity. Establishing the validity of the assumption of linearity first is important. If the analysis produced a VIF larger than 10, evidence of collinearity, I would have used the SPSS Transform feature, or created a new variable to eliminate collinearity. Outliers are obvious points in a scatterplot that are far away from the regression line. In addition, I used the Analyze/Forecasting/Create Model function in SPSS to check for outliers. If outliers were evident, I examined the data for circumstances that might have caused the results and might provide a resolution. Eliminating outliers from the dataset is an acceptable procedure (Field, 2013). I assessed the normality assumption by producing histograms of the dependent variable for the value ranges of the independent variables. Homoscedasticity is confirmable by generating scatterplots of the independent and dependent variables. I proceeded with the multiple linear regression

analysis after satisfactorily establishing the assumptions' validity or, if one or more of the assumptions was violated, I used SPSS's bootstrapping feature to address the issue.

I assessed the reliability of the EQ-i 2.0 assessment instrument by analyzing the participants' total EI scores and composite scale scores using the Analyze/Scale /Reliability function in SPSS statistical software. The independent variables GMs' EI and OE scores are ordered sets. Using the norm group as the benchmark, total EI scores that that are less than 90, between 90 -110, and above 110, reflects low, average, and -high EI scores respectively. OE scores of 70%-79%, 80% - 89%, and 90% - 100% represents low, average, and high -levels of operations respectively. I assessed the reliability of the EQ-i 2.0 assessment instrument in relation to my specific sample by completing the Analyze/Scale/Reliability Analysis function in SPSS statistical software. The Cronbach's alpha for my data set was determined to assess the closeness of its match to the Cronbach alpha values the developer provided in the instrumentation section. The EQ-i 2*.0 User Handbook* includes a summary of the internal consistency values for the instrument by listing the Cronbach's alpha values for the total EI score, composite scales, and subscales in the normative groups ranging from .77 – .97. According to Multi-Health Systems (2011), high alpha values are evidence for strong instrument reliability. The reliability statistics table lists the Cronbach's alpha statistics. Cronbach's coefficient alpha produces values ranging from 0 – 1 with higher values indicating greater reliability (Multi-Health Systems 2011; Pallant, 2013). The results of the analysis were consistent with the internal consistency values in the *User Handbook*.

The population of QSR GMs included unique and definable characteristics that necessitated the use of a purposive sampling method (Bristowe, Selman, & Murtagh, 2015) and precluded the use of random or systematic sampling method. Using the nonprobability sampling method excluded segments of the population. Therefore, the nonprobability sampling method limits the generalizability of the findings (Singleton & Straits, 2010) in different settings without additional research.

Transition and Summary

Section 2 included discussion of my role as an ethical, unbiased, and objective assayer of research data (see Stangor, 2014) and the specific actions for protecting the rights of participants. The section included discussions of the guidelines for conducting ethical research and the four inherent ethical challenges in research involving human participants.

In addition, I provided explanations of the individual and institutional procedures for protecting participants' rights, maintaining the integrity of the data, and complying with the federal regulations. I also included an explanation for my decision to select the EQ-i 2.0 online self-assessment tool for use in the study. Furthermore, Section 2 included the discussion about strategies to address violations of the assumptions and the commitment to using the bootstrapping function in SPSS. In Section 3, I provide the presentation of findings, applications to professional practice, the implication for social change, recommendations for action and further research, reflection, and my overall conclusions.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this quantitative, correlational study was to examine the possible relationship between the GM's EI, OE scores, and the employee turnover rates at restaurants from holding companies at Brand X QSR. Based on the results of the multiple linear regression analysis, there were no statistically significant relationships among the variables in the study. The analysis of the relationship between general managers' EI, OE scores, and turnover rates produced $p > .05$ for each level of the analyses. The result, of the analysis, was not statistically significant for the overarching research question: What is the relationship between general managers' emotional intelligence, operational evaluation scores, and employee turnover rates in quick service restaurants? Similarly, the resulting $p > .05$ values for the analyses were not statistically significant for both of the relationships in the following research subquestions:

RQ1: What is the relationship between general managers' EI and employee turnover rates in quick service restaurants?

RQ2: What is the relationship between OE scores and employee turnover rates in quick service restaurants?

Presentation of the Findings

In this study, data were collected via an online self-reporting process and analyzed using SPSS version 21 statistical software. The participants accessed the survey from an embedded link in the open invitation distributed by the participating organizations. The open invitation included the introductory letter, informed consent, and

background information. I received 70 responses and removed one survey because the participant did not provide an OE score. Therefore, 69 participants completed the survey with sufficient data to satisfy the requirement of 68 participants established by G*Power calculation. First, I assessed the variables and confirmed that the assumptions of multivariate normality were satisfied. Second, I assessed the reliability of the EQ-i 2.0 assessment instrument using the SPSS Analyze/Scale/Reliability function and confirmed that the Cronbach's alpha values were consistent with the publisher's internal consistency values. Third, I completed the multiple linear regression analysis to test the following hypotheses to answer the research question and subquestions:

H_0: There is no significant correlation between general managers' EI, OE scores, and employee turnover rates in QSRs.

H_a: There is a significant correlation between general managers' EI, OE scores, and employee turnover rates in QSRs.

What is the relationship between general managers' emotional intelligence, operational evaluation scores, and employee turnover rates in quick service restaurants?

RQ1: What is the relationship between general managers' EI and employee turnover rates in quick service restaurants?

RQ2: What is the relationship between OE scores and employee turnover rates in quick service restaurants?

Variables should satisfy the assumptions of multivariate normality to assure the reliability of the results multiple linear regression analysis (Korkmaz, Goksuluk, & Zararsiz, 2014).

As discussed in Section 2, the assumptions that satisfy multivariate normality were normality, linearity, the presence of outliers, homoscedasticity, and multicollinearity.

By using SPSS, I visually compared each model's variable histogram with a normal curve to determine the status of skewness or kurtosis (Field, 2013). The distributions of the scores for the individual variables were normal for employee turnover rate (see Figure 3) and general managers' EI (see Figure 4). The distribution of OE scores was skewed left (see Figure 5). However, the OE data points were consistent and within the standard range for the variable. OE scores measure the operations performance in each restaurant and manager work to produce the highest possible scores. The manager and employees are aware whenever an assessment is in progress, and they can actively work to earn the highest possible score. OE scores that are skewed left were within the acceptable range for the variable, and according to Field's (2013) guidelines, I retained all OE scores in the dataset.

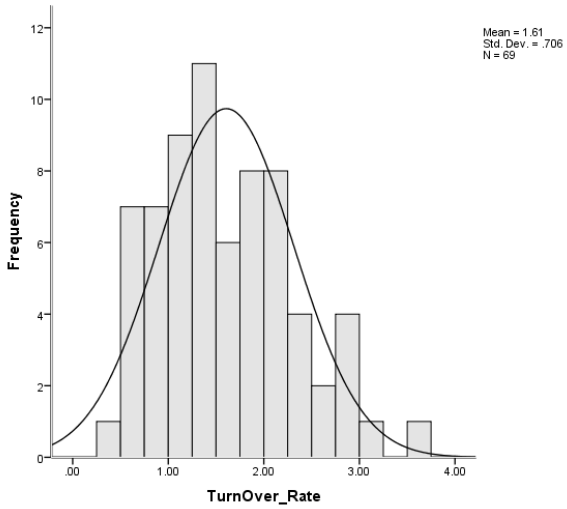


Figure 3. Histogram with a normal curve for employee turnover rates.

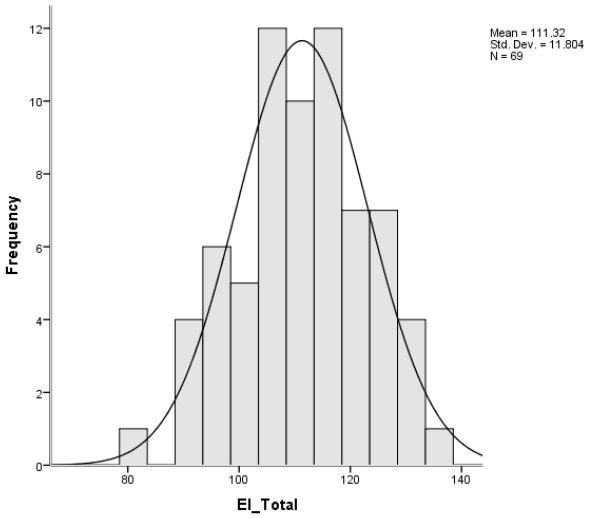


Figure 4. Histogram with a normal curve for General Managers' EI.

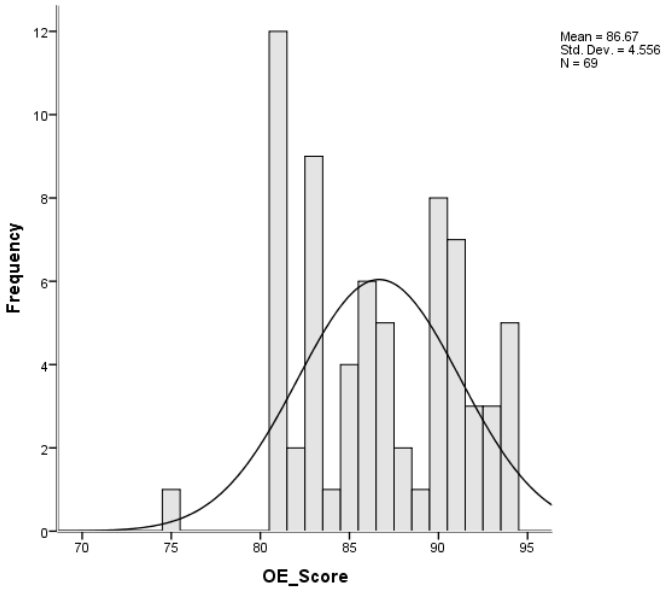


Figure 5. Histogram with a normal curve for OE scores.

I assessed the linearity of the model by a visual examination the symmetrical distribution of the points along a diagonal line in scatterplots of the dependent variable versus each input variable. The absence of bowing or fan shape in the scattering of the residual data point was evidence of little or no heteroscedasticity in the model (Berry & Feldman, 1985). The scatter plots are in Figures 6, 7, and 8. Visual examination of the scatterplots identified the absence of a pattern in the distribution of the data points and supported the determination that there was no violation of the assumption of multivariate normality.

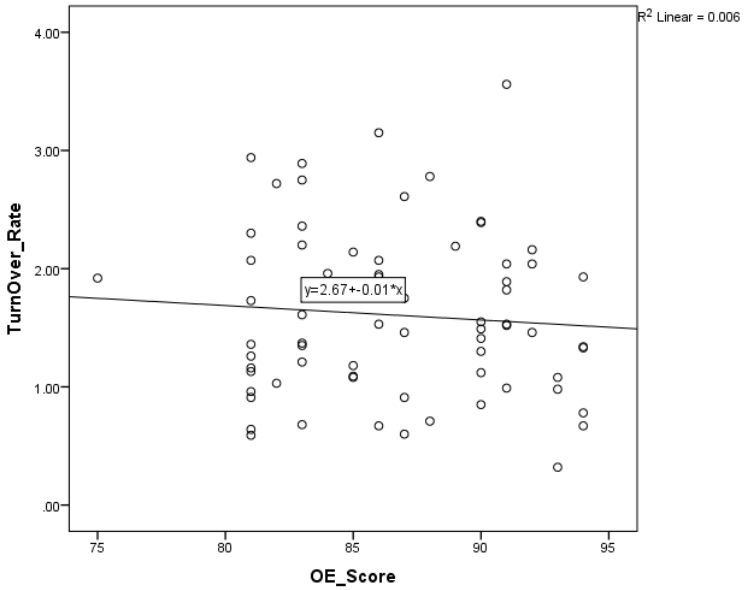


Figure 6. P-P scatter plot of OE Score versus employee turnover rate.

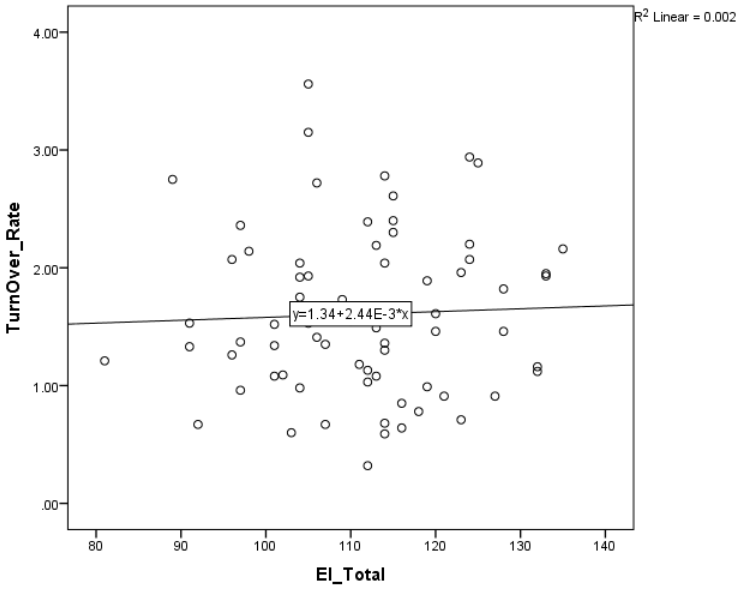


Figure 7. P-P scatter plot of GMs' EI versus employee turnover rate.

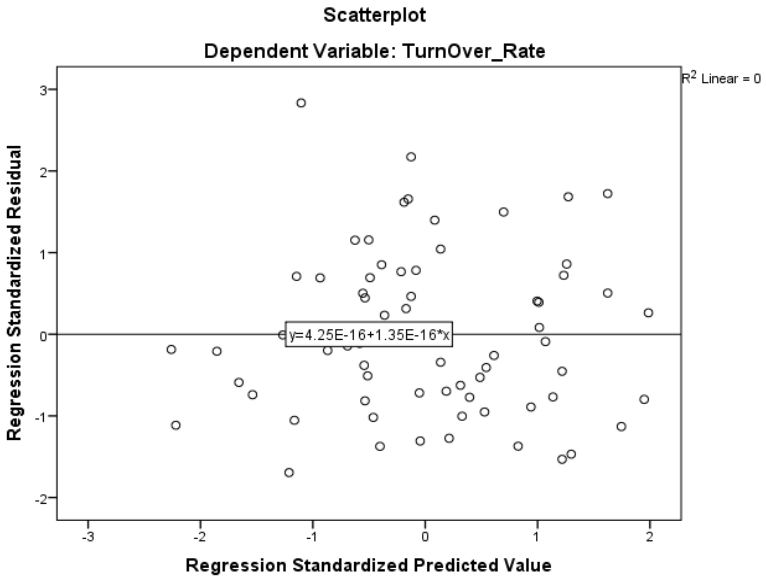


Figure 8. Residual value versus predicted value.

To identify possible outliers, I generated box plots to examine the distribution of the dataset and the dispersion of data points in comparison to variables' interquartile ranges. The boxplots examining employee turnover rates by OE scores and general managers' EI scores are included in Figures 9 and 10 respectively. Examination of the boxplot in Figure 9, turnover rates by OE scores, identified data points P13, P34, and P46 as three potential outliers. However, an assessment of the values of the potential outliers confirmed that the values were within the possible range of scores, (70% - 100%), for the OE variable. Visual examination of the boxplot (Figure 10) of employee turnover rates by general managers' EI total identified no potential outliers in the dataset.

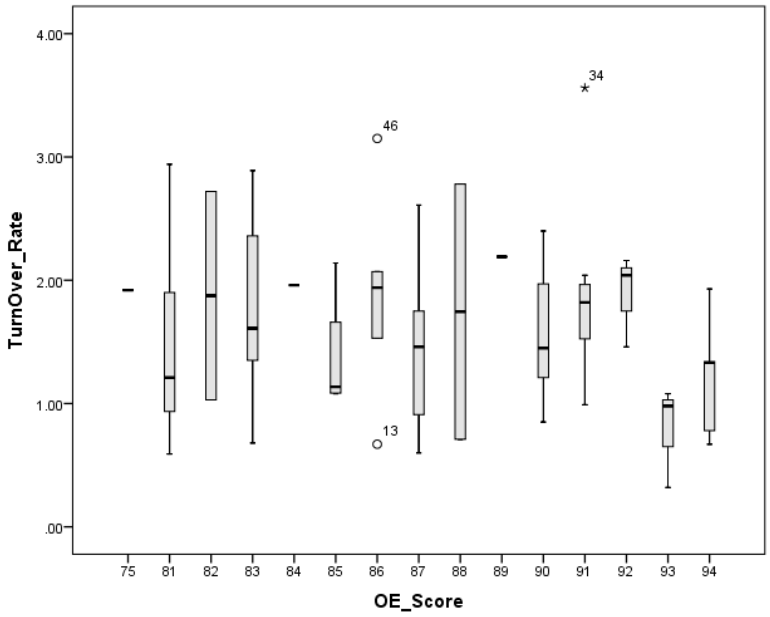


Figure 9. Boxplot examining employee turnover rate by restaurant OE scores.

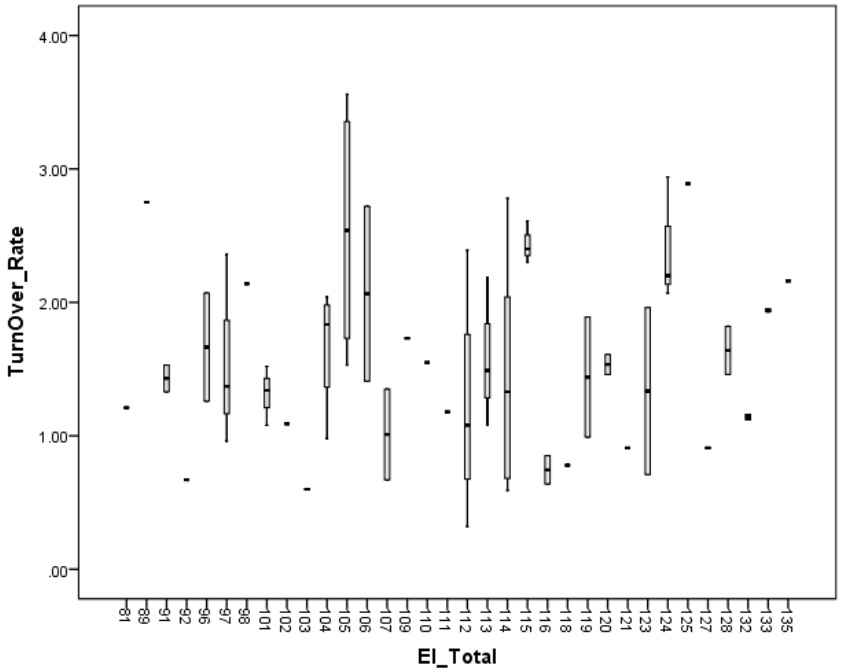


Figure 10. Boxplot examining employee turnover rate by general managers' EI scores.

The variance inflation factor (VIF) among OE scores and general managers EI total was 1.001 (see Table 5). VIF ≥ 10 indicates multicollinearity among the independent variables.

Table 5

Collinearity Statistics (N = 69)

	95% confidence interval for *B*		Collinearity statistics	
	Lower bound	Upper bound	Tolerance	VIF
(Constant)	-1.239	6.030		
OE score	-0.050	0.026	0.999	1.001
GMs' EI total	-0.012	0.017	0.999	1.001

Based on the results (VIF = 1.001) for OE score and general managers' EI, the evidence indicated the absence of multicollinearity. After confirming that there was no violation of the assumption of multivariate normality, I assessed the reliability of the EQ-i 2.0 assessment instrument for the sample using SPSS. The analysis produced Cronbach's alpha = .93. Cronbach's alpha produces values ranging from 0 – 1 and higher values indicate greater reliability (Pallant, 2013). Therefore, I confirmed the reliability of the assessment instrument for the dataset used in this study. Table 6 is a comparison of the inter-item correlation values versus the internal consistency values published in the EQ-i 2.0 *User Handbook*. Next, I conducted the multiple regression analysis. Table 7 lists the means and standard deviations for each variable.

Table 6

EQ-i 2.0 Instrument Reliability Value versus Internal Consistency in Normative Sample

	Inter-item correlation composite scale value				
	Self-perception	Self-expression	Interpersonal	Decision making	Stress management
General mgr.' EI	0.88	0.86	0.72	0.86	0.89
Normative sample	0.93	0.88	0.92	0.88	0.92

Table 7

Descriptive Statistics (N = 69)

Variables	*M*	*SD*
Employee turnover rate (dependent)	1.61	0.706
OE score (independent)	86.67	4.556
General managers' EI (independent)	111.32	11.804

The results of the multiple regression analysis revealed no statistically significant relationships between general managers' EI, OE scores, and employee turnover rates in QSRs in the model ($p > .05$). The R^2 value of .01 associated with the regression model suggested that the combination of general managers' EI total and OE scores accounted for approximately 1% of the variation in employee turnover rate in QSRs. The equation for the model summary was $R^2 = .01$, Adjusted $R^2 = -.02$, $F(2,66) = .27$, $p = .766$. Table 8 lists the results of the ANOVA test.

Table 8

Results of the ANOVA[a] Test (N = 69)

	Sum of squares	*df*	Mean square	*F*	Sig
Regression	0.274	2	0.137	0.268	0.766[b]
Residual	33.661	66	0.51		
Total	33.935	68			

a. Dependent variable: employee turnover rate
b. Predictors: (Constant), general managers' EI and OE score

Data in the coefficients presented in Table 9 reflected $p > .05$ for both relationships addressed by RQ1 and RQ2. Therefore, the regression analysis produced results that demonstrated relationships that were not statistically significant for either:

RQ1: What is the relationship between general managers' EI and employee turnover rates in quick service restaurants? ($p = .727$) and

RQ2: What is the relationship between OE scores and employee turnover rates in quick service restaurants? ($p = .516$)

Table 9

Coefficients (N = 69)

Model Parameter	Unstandardized coefficients		Standardized coefficients			95% CI for *B*
	B	Std. error	Beta	*t*	Sig.	
(Constant)	2.396	1.820		1.316		
OE Scores	-0.012	0.019	0.080	-0.653	0.516	[-.05,.03]
General managers' EI	0.003	0.007	0.043	0.351	0.727	[-.01,.02]

a. Dependent variable: employee turnover rates

Based on the results of the analysis, for the general managers' participating in the study, the EI and OE scores did not explain 99% of the variation in employee turnover rates in QSRs. The confidence interval associated with the regression analysis contains 0 therefore; the null hypothesis was not rejected:

H_0: There is no significant correlation between general managers' EI, OE scores, and employee turnover rates in QSRs.

The findings indicated that the relationship between general managers' EI, OE scores, and employee turnover rates in QSRs were not statistically significant. Previous researchers have analyzed the role of EI in the development of managerial and leadership competencies, and organizational development. I assessed the traits based model of EI, OE scores, and employee turnover rates specifically in the QSR industry. Researchers have identified correlations between EI and managerial skills, and concluded, for their populations, EI skills accounted for approximately 48% of managers' ability to adapt and manage relationships (Prentice & King, 2013).

According to Killian (2012), EI skills help managers to develop and promote healthy social and professional relationships. Lee and Ok (2012) concluded that EI competent managers could predict employees' emotional response to workplace rules, sense of well-being, and job satisfaction. Jain, Giga, and Cooper (2013) concluded that managers influence job satisfaction and Leisanyane and Khaola (2013) argued that job satisfaction is the strongest predictor of employees' turnover intention. Arguably, EI skills are important in management (Azouzi & Jarboui, 2013) however, it is possible that mediating factors other than the general managers' EI and OE scores influence employees' turnover intentions and turnover rates in QSRs. Factors such as lateral workplace violence promote employees' turnover intention (Laschinger & Fida, 2013). Organizational culture might be another mediating factor in employee turnover rates, and while the EI ability of the manager is a factor in fostering the culture of the organization, Grunes, Gudmundsson, and Irmer (2013) argued that EI variables were not valid predictors of success in leadership.

Organizational culture is important because of its potential for affecting the psychological health of employees (Laborde, Lautenbach, Allen, Herbert, & Achtzehn, 2014) and job stressors influence employees' turnover intentions. Employees' personal opinions inform their opinions about the organization and the leaders (Nielsen & Daniels, 2012). Variables such as gender, culture, age, and organizational politics are other possible factors that might influence employee turnover rates. Although previous researchers (Du Plessis, Wakelin, & Nel, 2015; Goleman, 1998; Marzucco, Marique, Stinglhamber, De Roeck, & Hansez, 2014; Mayer, Caruso, & Salovey, 1999; Mayer,

Salovey, & Caruso, 2004) have linked the EI skills managers to the formative factors in organizational cultures, the results of this study's population provided support for statistically nonsignificant relationships between general managers' EI, OE scores, and employee turnover rates in QSRs.

Applications to Professional Practice

The findings of this study added to the existing base of knowledge relating to EI and management, the relationship between managers' EI and employee turnover rates and expanded the knowledge of the variables that can affect employee turnover rates in QSRs. The leaders in QSRs invest a significant amount of time and financial resources to recruit, train, develop, and retain employees. The persistently high employee turnover rate is a drain on important resources and understanding turnover in QSR is significant in the planning for investments in HR.

The results of this study provide direction to HR leaders and manager in QSR because there was no statistically significant relationship between EI, OE, and employee turnover rates, HR managers can redirect resources to finding a solution or improving other components of employees' work environment. The absence of a significant relationship among the variables in this study does not mean that the EI skills of the general manager are unimportant because researchers have concluded that EI is an important factor in organizational culture (Zyphur et al. 2016). Organization culture is a possible moderating variable in job satisfaction, which is a predictor of turnover rate Kelloway et al. (2012).

While the employee turnover rates in QSRs are much higher than overall private industry turnover rates, it is possible that other over-riding factors result in actual employee turnover in QSRs. The results of the study do not challenge the findings from earlier researchers regarding the importance of EI skills to leadership success. Instead, the results of the study identified no statistically significant relationship between general managers' EI, OE scores, and employee turnover rates in QSRs. Therefore, the findings clarified the role of two important QSR related variables within the turnover equation. High employee turnover rates within QSR industry continue to be an important issue to be resolved (Mathe, Scott-Halsell, & Roseman, 2013). Based on the purposeful sampling method utilized in this study; the conclusion is generalizable only to the specific population of QSR managers. However, achieving the sample size of $N = 69$ satisfied the G*Power calculated sample size needed to infer generalizability of the findings to similar population of QSR managers. The findings of the study can serve QSR organizations' leaders to understand and reduce the persistently high employee turnover rates in QSRs.

Implications for Social Change

The findings of the study have implications for promoting beneficial social change for individuals, communities, organization, and institutions, within the U.S. society. Food service and accommodation industry experienced an employee turnover rate of 62.6% versus 42.2% in the overall private sector companies in 2013 (U.S. Department of Labor, 2014a). According to the U.S. Department of Labor (2016), 18.11% of overall private industry turnover for December 2015 occurred in accommodation and food service companies. The mean (*M*) turnover rate of employees

in this study with $N = 69$ restaurants was 161%. At $M = 161\%$, the average employee turnover rate was 157% higher than the U.S. Department of Labor reported industry employee turnover rate and 281.5% higher than overall private sector employee turnover rates for 2013.

By identifying one source of elevated employee turnover rates, this study can serve as the basis for catalyzing the development of a solution. Reducing turnover may improve employees' health by reducing work-related stress (Rafiee, Kazemi, and Alimiri, 2013). Although the nonprobabilistic sampling method limits the generalizability of the results (Daniel, 2012), the results of this study can be used as the basis for additional research and the search for a solution to lower turnover rates in QSR industry. The sample size of $N = 69$, based on G*Power statistical software, infers that the findings of the study are generalizable to similar population of QSR managers at the 95% confidence level. In addition, by identifying the absence of a significant relationship between the general managers' EI, OE scores, and employee turnover rates, HR managers, organization leaders, and staffing support service providers have one basis to continue to seek solutions that target a defined problem in QSR industry. Reducing the elevated employee turnover rates within QSRs could lessen the demands for unemployment support for food and housing service employees (Kuminoff, Schoellman, & Timmins, 2015) and improve organizations' profitability (Dong, Seo, & Bartol, 2014).

Recommendations for Action

HR managers, organizational leaders, and restaurant managers should recognize that high employee turnover rates reduce operation efficiency and the ability to deliver

customer service, resulting in greater expense and lower profitability. Employees within QSRs should be aware of the high attrition rates within the QSR industry so that they might be able to prepare themselves to cope with a possible career with high stressors. Understanding that the relationship among general managers' EI, OE scores, and employee turnover rates was not statistically significant and that employee turnover rate is high, should serve as a call to action for HR managers and organizational decision-makers. Therefore, it is important for the leaders and managers in the QSR industry to invest in the continued search for a solution to the chronic turnover issue by developing programs and processes that improve employees' job satisfaction and commitment to the QSR organizations.

I will disseminate the results of the study via presentations at QSR industry related and academic conferences, in summarized articles shared on online bulletin boards, and during interest group discussions. I plan to continue studying the EI theory and to use the knowledge in leadership development courses in my profession.

Recommendations for Further Research

Recommendations for further study related to understanding the role of EI in employee turnover rates within QSR industry should include assessing EI using an ability model instrument such as the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) instead of the traits model instrument that was used in this study. The difference in theoretical approach might influence the way QSR manager act versus think and the effect might vary in a study within a different theoretical framework. Furthermore researchers should consider using the 360 approach to collect EI data and possibly limit

or eliminate the impact of using self-assessment instruments. Comparing the results of individual organizations might account for the effect of organizational culture and other specific moderating variables such as gender of participants, the level of education, and the conditions of the physical work environment. Future studies could include a factor analysis to determine whether the composite and subscale variables of the EQ-i 2.0 1-5-15 structure are better predictors of employee turnover rates in QSRs.

Conducting a national study could identify regional differences in the turnover experience. The result of the quantitative correlation study provided insights into the relationships between the variable and did not address the questions about causality. Future researchers should employ a qualitative approach to studying EI and employee turnover rates. Employing qualitative research methods can enable the researchers to understand the issues influencing high turnover rates in QSRs. Additional research can provide HR managers and organizational leaders with more tools to design, develop, and implement workable solutions to reduce and control employee turnover rates for increasing QSRs' profitability.

Reflections

I began the DBA Doctoral Study process with confidence in my independence and now I recognize and believe that interdependence is a significant component of personal and professional success. Countless numbers of strangers supported me in my doctoral pursuit. I expected that the results of my research would confirm that the general managers' EI was a significant predictor of employee turnover rates because much of the leadership literature that I have studied emphasized that leadership attitude affects

employees' attitudes and behaviors. I was surprised at the results of the analysis; therefore, I completed the analysis several times to ensure the accuracy of the results. I have since accepted that my initial surprise was the result of my personal bias regarding the effect of managers EI on employee turnover rates, for the subject population.

Based on the results of my research, I am searching for the answer to another question: What is the relationship between personal needs and turnover rate in QSR employees? I believe it is important to understand the employees' perceptions of why the turnover rates are high in QSRs. I have renewed respect for the requirement that researchers must remain open to the results of their research and maintain a healthy level of skepticism of opinions and arguments provided without robust support.

Summary and Study Conclusions

The significance of this study is that the results supported a statistically nonsignificant relationship between general managers' EI, OE scores, and turnover rates within the subject population of QSRs. Therefore, understanding the result may help HR managers, organization leaders, and restaurant managers as they work to develop programs, invest in solutions, and execute daily activities within the workplace to enhance job satisfaction and manage employee turnover rates. The findings of this study indicate that factors other than the general managers' EI and OE scores relate to employees' turnover rates within the subject QSR population.

References

Abbas, M., Raja, U., Darr, W., & Bouckenooghe, D. (2012). Combined effects of perceived politics and psychological capital on job satisfaction, turnover intentions, and performance. *Journal of Management, 40*, 1813–1830. doi:10.1177/0149206312455243

Ackfeldt, A. L., & Malhotra, N. (2013). Revisiting the role stress-commitment relationship: Can managerial interventions help? *European Journal of Marketing, 47*, 353–374. doi:10.1108/03090561311297373

Al-ghazawi, M., & Awad, A. (2014). Impacts of the emotional intelligence in the Suez Canal Authority (SCA) and job satisfactions. *International Journal of Business and Social Science, 5*(6), 203–214. Retrieved from http://ijbssnet.com/

Algina, J., & Olejnik, S. (2003). Sample size tables for correlation analysis with applications in partial correlation and multiple regression analysis. *Multivariate Behavioral Research, 38*, 309–323. doi:10.1207/S15327906MBR3803

Allen, V. D., Weissman, A., Hellwig, S., Maccann, C., & Roberts, R. D. (2014). Development of the situational test of emotional understanding - brief (STEU-B) using item response theory. *Personality and Individual Differences, 65*, 3–7. doi:10.1016/j.paid.2014.01.051

Allio, R. J. (2013). Leaders and leadership – many theories, but what advice is reliable? *Strategy & Leadership, 41*(1), 4–14. doi:10.1108/10878571311290016

Alpullu, A. (2013). Examination of emotional intelligence awareness of managers working in sports institution. *International Journal of Academic Research, 5*(6), 79–82. doi:10.7813/2075-4124.2013/5-6/B.14

Anderson, A. (2013). *Business Statistics for Dummies*. Hoboken, NJ: John Wiley & Sons.

Aradilla-Herrero, A., Tomás-Sábado, J., & Gómez-Benito, J. (2013). Death attitudes and emotional intelligence in nursing students. *Omega, 66*(1), 39–55. doi:10.2190/OM.66.1.c

Aremu, A. O., Pakes, F., & Johnston, L. (2011). The moderating effect of emotional intelligence on the reduction of corruption in the Nigerian Police. *Police Practice and Research, 12,* 195–208. doi:10.1080/15614263.2010.536724

Ashkanasy, N. M., & Humphrey, R. H. (2011). Current emotion research in organizational behavior. *Emotion Review, 3,* 214–224. doi:10.1177/1754073910391684

Azouzi, M. A., & Jarboui, A. (2013). CEO emotional intelligence and board of directors & apos; efficiency. *Corporate Governance, 13,* 365–383. doi:10.1108/CG-10-2011-0081

Babbie, E. (2013). *The basics of social research*. Belmont, CA: Cengage Learning.

Babbie, E. (2015). *The practice of social research*. Boston, MA: Cengage Learning.

Bagozzi, R. P., Verbeke, W. J. M. I., Dietvorst, R. C., Belschak, F. D., van den Berg, W. E., & Rietdijk, W. J. R. (2013). Theory of mind and empathic explanations of machiavellianism: A neuroscience perspective. *Journal of Management, 39,* 1760–1798. doi:10.1177/0149206312471393

Bailey, C., Murphy, R., & Porock, D. (2011). Professional tears: Developing emotional intelligence around death and dying in emergency work. *Journal of Clinical Nursing, 20,* 3364–3372. doi:10.1111/j.1365-2702.2011.03860.x

Barbuto, J. E., Gottfredson, R. K., & Searle, T. P. (2014). An examination of emotional intelligence as an antecedent of servant leadership. *Journal of Leadership & Organizational Studies, 21,* 315–323. doi:10.1177/1548051814531826

Bar-On, R. (1997). *The Emotional Quotient Inventory (EQ-i): A Test of Emotional Intelligence.* Toronto, Canada: Multi-Health Systems.

Bar-On, R. (2004). "The Bar-On Emotional Quotient Inventory (EQ-i): rationale, description and psychometric properties", in Geher, G. (Ed.), *Measuring Emotional Intelligence: Common Ground and Controversy*. Hauppauge, NY: Nova Science.

Bar-On, R. (2005). The Bar-On model of emotional-social intelligence, *Psicothema, 17,* in Fernández-Berrocal, P. and Extremera, N. (Eds), *Emotional intelligence, special issue.* Retrieved from http://www.psicothema.com

Bar-On, R. (2006a). The Bar-On model of emotional-social intelligence (ESI). *Psicothema, 18,* 1–28. Retrieved from http://www.eiconsortium.org/

Bar-On, R. (2006b). The Bar-On model of emotional-social intelligence (ESI). *Psicothema, 18(supl),* 13–25. Retrieved from http://www.psicothema.com

Bar-On, R. (2010). Emotional intelligence: An integral part of positive psychology. *South African Journal of Psychology, 40*(1), 54–62. Retrieved from http://www.sajp.org.za/

Barratt, M. J., Ferris, J. A., & Lenton, S. (2015). Hidden populations, online purposive sampling, and external validity taking off the blindfold. *Field Methods, 27*, 3–21. doi:10.1177/1525822X14526838

Belmont Report. (1979). *The Belmont Report: Ethical principles and guidelines for the protection of human subjects of research*. Retrieved from http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html

Bennett, K., & Sawatzky, J.-A. V. (2013). Building emotional intelligence: A strategy for emerging nurse leaders to reduce workplace bullying. *Nursing Administration Quarterly, 37*, 144–51. doi:10.1097/NAQ.0b013e318286de5f

Berry, W. D., & Feldman, S. (1985). *Multiple regression in practice* (No. 50). Newbury Park, CA: Sage.

Best, H., & Wolf, C. (2014). *The SAGE handbook of regression analysis and causal inference*. doi:10.4135/9781446288146

Bitmiş, M. G., & Ergeneli, A. (2014). Emotional intelligence: Reassessing the construct validity. *Procedia - Social and Behavioral Sciences, 150*, 1090–1094. doi:10.1016/j.sbspro.2014.09.123

BLS. (2008). BLS Information: Glossary. Retrieved from http://www.bls.gov/bls/glossary.htm#T

BLS. (2015). Occupational Employment Statistics: *Occupational employment and wages, May, 2014*. Retrieved from http://www.bls.gov/oes/current/oes353021.htm

BLS. (2015a). *Job opening and labor turnover-May 2015.* Retrieved from http://www.bls.gov/news.release/pdf/jolts.pdf

BLS. (2015b). *Occupational employment and wages-May 2014*. Retrieved from http://www.bls.gov/news.release/pdf/ocwage.pdf

Blumberg, D. M., Giromini, L., & Jacobson, L. B. (2015). Impact of police academy training on recruits' integrity. *Police Quarterly, 19,* 63–86. doi:10.1177/1098611115608322

Bono, J. E., Glomb, T. M., Shen, W., Kim, E., & Koch, A. J. (2013). Building positive resources: Effects of positive events and positive reflection on work stress and health. *Academy of Management Journal, 56,* 1601–1627. doi:10.5465/amj.2011.0272

Boyatzis, R. (2014). Possible contributions to leadership and management development from neuroscience. *Academy of Management Learning & Education, 13,* 300–304. Retrieved from http://aom.pace.edu/amle/

Boyatzis, R. E., Good, D., & Massa, R. (2012). Emotional, social, and cognitive intelligence and personality as predictors of sales leadership performance. *Journal of Leadership & Organizational Studies, 19,* 191–201. doi:10.1177/1548051811435793

Brackett, M. A., & Mayer, J. D. (2003). Convergent, discriminant, and incremental validity of competing measures of emotional intelligence. *Personality & Social Psychology Bulletin, 29,* 1147–1158. doi:10.1177/0146167203254596

Brackett, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional intelligence: Implications for personal, social, academic, and workplace success. *Social and Personality Psychology Compass, 5,* 88–103. doi:10.1111/j.1751-9004.2010.00334.x

Brackett, M. A., & Salovey, P. (2006). Measuring emotional intelligence with the Mayer-Salovery-Caruso Emotional Intelligence Test (MSCEIT). *Psicothema, 18*(SUPPL.1), 34–41. Retrieved from http://www.psicothema.com/

Brady, D. I., Saklofske, D. H., Schwean, V. L., Montgomery, J. M., McCrimmon, A. W., & Thorne, K. J. (2014). Cognitive and emotional intelligence in young adults with Autism Spectrum Disorder without an accompanying intellectual or language disorder. *Research in Autism Spectrum Disorders, 8,* 1016–1023. doi:10.1016/j.rasd.2014.05.009

Bristowe, K., Selman, L., & Murtagh, F. (2015). Qualitative research methods in renal medicine: an introduction. *Nephrology Dialysis Transplantation: NDT Perspectives, 30,* 1424-1431. doi:10.1093/ndt/gfu410

Bryman, A. (2012). *Social research methods*. New York, NY: Oxford University Press.

Bryman, A., & Bell, E. (2015). *Business research methods.* New York, NY: Oxford University Press.

Campbell, D. T., & Stanley, J. C. (2015). *Experimental and quasi-experimental designs for research.* Ravenio Books. Retrieved from https://books.google.com

Caruso, D. R., Mayer, J. D., & Salovey, P. (2002). Emotional intelligence and emotional leadership. In Riggio, R.E. & Murphy, S.E. (Eds.), *Multiple Intelligences and Leadership. (pp. 55-73).* Mahwah, NJ: Erlbaum.

Castro, F., Gomes, J., & de Sousa, F. C. (2012). Do intelligent leaders make a difference? The effect of a leader's emotional intelligence on followers' creativity. *Creativity and Innovation Management, 21,* 171–182. doi:10.1111/j.1467-8691.2012.00636.x

Catlett, S., & Lovan, S. R. (2011). Being a good nurse and doing the right thing: A replication study. *Nursing Ethics, 18,* 54–63. doi:10.1177/0969733010386162

Cavazotte, F., Moreno, V., & Hickmann, M. (2012). Effects of leader intelligence, personality and emotional intelligence on transformational leadership and managerial performance. *The Leadership Quarterly, 23*, 443–455. doi:10.1016/j.leaqua.2011.10.003

Ceravolo, D. J., Schwartz, D. G., Foltz-Ramos, K. M., & Castner, J. (2012). Strengthening communication to overcome lateral violence. *Journal of Nursing Management, 20,* 599–606. doi:10.1111/j.1365-2834.2012.01402.x

Cheng, C. Y., Jiang, D. Y., Cheng, B. S., Riley, J. H., & Jen, C. K. (2015). When do subordinates commit to their supervisors? Different effects of perceived supervisor integrity and support on Chinese and American employees. *The Leadership Quarterly, 26,* 81–97. doi:10.1016/j.leaqua.2014.08.002

Chernick, M. R. (2007). What Is Bootstrapping ? In Bootstrap Methods: A Guide for Practitioners and Researchers (pp. 1–25). Hoboken, NJ: John Wiley & Sons. doi:10.1002/9780470192573.ch1

Cherniss, C., Extein, M., Goleman, D., & Weissberg, R. P. (2006). Emotional intelligence: What does the research really indicate? *Educational Psychologist, 41,* 239–245. doi:10.1207/s15326985ep4104_4

Chhabra, M., & Chhabra, B. (2013). Emotional intelligence and occupational stress: a study of Indian Border Security Force personnel. *Police Practice and Research, 14,* 1–16. doi:10.1080/15614263.2012.722782

Choi, S., & Kluemper, D. H. (2012). The relative utility of differing measures of emotional intelligence: Other-report EI as a predictor of social functioning. *Revue Européenne de Psychologie Appliquée/European Review of Applied Psychology, 62,* 121–127. doi:10.1016/j.erap.2012.01.002

Chughtai, A. A. (2013). Linking affective commitment to supervisor to work outcomes. *Journal of Managerial Psychology, 28,* 606–627. doi:10.1108/JMP-09-2011-0050

Chughtai, A. A. (2015). Creating safer workplaces: The role of ethical leadership. *Safety Science, 73,* 92–98. doi:10.1016/j.ssci.2014.11.016

Clinical Tools Inc. (2006). Guidelines for responsible data management in scientific research. Retrieved from http://ori.hhs.gov/education/products/clinicaltools/data.pdf

Codier, E. (2014). Making the case for emotionally intelligent leaders. *Nursing Management, 45,* 44–48. doi:10.1097/01.NUMA.0000440634.64013.11

Coetzee, M., & Harry, N. (2014). Emotional intelligence as a predictor of employees' career adaptability. *Journal of Vocational Behavior, 84,* 90–97. doi:10.1016/j.jvb.2013.09.001

Cohen, A., & Abedallah, M. (2015). The mediating role of burnout on the relationship of emotional intelligence and self-efficacy with OCB and performance. *Management Research Review, 38,* 2–28. doi:10.1108/MRR-10-2013-0238

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155–159. doi:10.1038/141613a0

Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. New York, NY: Academic Press

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: Routledge.

Collins, C. S. & Cooper, J. E. (2014). Emotional intelligence and the qualitative researcher. *International Journal of Qualitative Methods. 13,* 88–103. Retrieved from http://ejournalslibraryualberta.fjzjfw.com/

Connelly, L.M. (2013). Limitation section. *Medsurg Nursing. 22*, 335–336. Retrieved from http://www.medsurgnursing.net/cgi-bin/WebObjects/MSNJournal.woa

Cox, S., Drew, S., Guillemin, M., Howell, C., Warr, D., & Waycott, J. (2014). *Guidelines for Ethical Visual Research Methods. Visual Research Collaboratory.* Melbourne, Australia: The University of Melbourne. Retrieved from http://vrc.org.au

Creative Research Systems (n.d.). *Sample size calculator. The Survey System*. Retrieved from http://www.surveysystem.com/sample-size-formula.htm

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*, 297–334. doi:10.1007/BF02310555

Crowne, K. A. (2013). Cultural exposure, emotional intelligence, and cultural intelligence: An exploratory study. *International Journal of Cross Cultural Management, 13,* 5–22. doi:10.1177/1470595812452633

Daniel, J. (2012). *Sampling essentials: Practical guidelines for making sampling choices*. Los Angeles, CA: SAGE.

Davidson, P. P. (2012). Research participation as work: Comparing the perspectives of researchers and economically marginalized populations. *American Journal of Public Health, 102,* 1254-1259. doi:10.2105/AJPH.2011.300418

Dawda, D., & Hart, S. D. (2000). Assessing emotional intelligence: Reliability and validity of the Bar-On Emotional Quotient Inventory (EQ-i) in university students. *Personality and Individual Differences, 28,* 797–812. doi:10.1016/S0191-8869(99)00139-7

DeConinck, J. B. (2014). Outcomes of ethical leadership among salespeople. *Journal of Business Research, 68,* 1086–1093. doi:10.1016/j.jbusres.2014.10.011

Dehejia, R. (2015). Experimental and non-experimental methods in development economics: A porous dialectic. *Journal of Globalization and Development, 6,* 47–69. doi:10.1515/jgd-2014-0005

Deshpande, S. P., Joseph, J., & Berry, K. (2012). Ethical misconduct of business students: some new evidence. *American Journal of Business Education, 5*, 719–726. Retrieved from http://www.cluteinstitute.com

Di Fabio, A., & Palazzeschi, L. (2015). Beyond fluid intelligence and personality traits in scholastic success: Trait emotional intelligence. *Learning and Individual Differences, 40,* 121–126. doi:10.1016/j.lindif.2015.04.001

Di Fabio, A., & Saklofske, D. H. (2014). Comparing ability and self-report trait emotional intelligence, fluid intelligence, and personality traits in career decision. *Personality and Individual Differences, 64,* 174–178. doi:10.1016/j.paid.2014.02.024

Dong, Y., Seo, M., & Bartol, K. (2014). No pain, no gain: An affect-based model of developmental job experience and the buffering effects of emotional intelligence. *Academy of Management Journal, 57,* 1056–1077. doi:10.5465/amj.2011.0687

Dormann, C. F., Elith, J., Bacher, S., Buchmann, C., Carl, G., Carré, G., Marquéz, J. R. G., Gruber, B., Lafourcade, B., Leitão, P. J., Münkemüller, T., McClean, C., Osborne, P. E., Reineking, B., Schröder, B., Skidmore, A. K., Zurell, D. and Lautenbach, S. (2013). Collinearity: A review of methods to deal with it and a simulation study evaluating their performance. *Ecography, 36*, 27–46. doi:10.1111/j.1600-0587.2012.07348.x

Drescher, M. a, Korsgaard, M. A., Welpe, I. M., Picot, A., & Wigand, R. T. (2014). The dynamics of shared leadership: Building trust and enhancing performance. *The Journal of Applied Psychology, 99*, 771–783. doi:10.1037/a0036474

Dunn, T. J., Baguley, T., & Brunsden, V. (2014). From alpha to omega: A practical solution to the pervasive problem of internal consistency estimation. *British Journal of Psychology, 105*, 399–412. doi:10.1111/bjop.12046

Du Plessis, M., Wakelin, Z., & Nel, P. (2015). The influence of emotional intelligence and trust on servant leadership. *SA Journal of Industrial Psychology, 41*, 1–9. doi:10.4102/sajip.v41i1.1133

Duijkers, J., Vissers, C., Verbeeck, W., Arntz, A., & Egger, J. (2014). Social cognition in the differential diagnosis of autism spectrum disorders and personality disorders. *Clinical Neuropsychiatry, 11*, 118–129. Retrieved from http://www.clinicalneuropsychiatry.org/

Emmerling, R. J., & Boyatzis, R. E. (2012). Emotional and social intelligence competencies: cross cultural implications. *Cross Cultural Management: An International Journal, 19,* 4–18. doi: 10.1108/13527601211195592

Emory University. (n.d.). *Correlation coefficient.* Retrieved from http://www.psychology.emory.edu/clinical/bliwise/Tutorials/SCATTER/scatterplots/corr.htm

Fallon, C. K., Panganiban, A. R., Wohleber, R., Matthews, G., Kustubayeva, A. M., & Roberts, R. (2014). Emotional intelligence, cognitive ability and information search in tactical decision-making. *Personality and Individual Differences, 65,* 24–29. doi:10.1016/j.paid.2014.01.029

Farh, C. I. C. C., Seo, M. G., & Tesluk, P. E. (2012). Emotional intelligence, teamwork effectiveness, and job performance: The moderating role of job context. *Journal of Applied Psychology, 97,* 890–900. doi:10.1037/a0027377

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41,* 1149–1160. doi:10.3758/brm.41.4.1149

Fernandez, S. & Moldogaziev, T. (2013). Employee empowerment, employee attitudes, and performance: Testing a causal model. *Public Administration Review, 73,* 490–506. doi:10.1111/puar.12049

Fernández-Berrocal, P., Extremera, N., Lopes, P. N., & Ruiz-Aranda, D. (2014). When to cooperate and when to compete: Emotional intelligence in interpersonal decision-

making. *Journal of Research in Personality, 49,* 21–24. doi:10.1016/j.jrp.2013.12.005

Ferrándiz, C., Hernández, D., Berjemo, R., Ferrando, M., & Sáinz, M. (2012). Social and emotional intelligence in childhood and adolescence: Spanish validation of a measurement instrument // La inteligencia emocional y social en la niñez y adolescencia: validación de un instrumento para su medida en lengua castellana. *Journal of Psychodidactics, 17,* 309-338. doi: 10.1387/RevPsicodidact.2814

Field, A. (2013). *Discovering statistics using SPSS* (4th ed.). London, England: Sage.

Fiori, M., & Antonakis, J. (2011). The ability model of emotional intelligence: Searching for valid measures. *Personality and Individual Differences, 50,* 329–334. doi:10.1016/j.paid.2010.10.010

Fiori, M., Antonietti, J. P., Mikolajczak, M., Luminet, O., Hansenne, M., & Rossier, J. (2014). What is the ability emotional intelligence test (MSCEIT) good for? An evaluation using item response theory. *PloS One, 9,* e98827. doi:10.1371/journal.pone.0098827

Fiske, S. T., & Hauser, R. M. (2014). Protecting human research participants in the age of big data. *Proceedings of the National Academy of Sciences, 111*(38), 1–2. doi:10.1073/pnas.1414626111

Føllesdal, H., & Hagtvet, K. (2013). Does emotional intelligence as ability predict transformational leadership? A multilevel approach. *The Leadership Quarterly, 24,* 747–762. doi:10.1016/j.leaqua.2013.07.004

Frick, R. W. (1998). A better stopping rule for conventional statistical tests. *Behavior Research Methods, Instruments, & Computers, 30*, 690–697. doi:10.3758/BF03209488

Fuentes, M. D. C. P., Linares, J. J. G., Rubio, I. M., & Jurado, M. D. M. M. (2014). Brief emotional intelligence inventory for senior citizens (EQ-i-M20). *Psicothema, 26*, 524–530. doi:10.7334/psicothema2014.166

Fu, W. (2014). The impact of emotional intelligence, organizational commitment, and job satisfaction on ethical behavior of Chinese employees. *Journal of Business Ethics, 122*, 137–144. doi:10.1007/s10551-013-1763-6

García-Pérez, M. A. (2012). Statistical conclusion validity: Some common threats and simple remedies. *Frontiers in Psychology, 3*(AUG), 1–11. doi:10.3389/fpsyg.2012.00325

Gardner, H. (2011). *Frames of mind: The theory of multiple intelligences*. New York, NY: Basic books.

Goleman, D. (1995). *Emotional intelligence*. New York, NY: Bantam Books.

Goleman, D. (1998). An EI-Based theory of performance. In C. Cherniss & D. Goleman (Eds.), *The Emotionally Intelligent Workplace* (pp. 1–18). Retrieved from http://www.eiconsortium.org/

Goleman, D. (2006). *Working with emotional intelligence.* New York, NY: Bantam Books.

Goleman, D. (2011). *Leadership: The power of emotional intelligence; Selected writings.* Northampton, MA: More than Sound.

Goleman, D., Boyatzis, R., & Mckee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence.* Boston, MA: Harvard Business School Press.

Grant, A. M. (2012). Rocking the boat but keeping it steady: The role of emotion regulation in employee voice. *Academy Of Management Journal, 56,* 1703–1723. doi:10.5465/amj.2011.0035

Green, S. B., & Salkind, N. J. (2013). *Using SPSS for Windows and Macintosh: Analyzing and understanding data.* Upper Saddle River, NJ: Pearson Education.

Gregory, B. T., Osmonbekov, T., Gregory, S. T., Albritton, M. D., & Carr, J. C. (2013). Abusive supervision and citizenship behaviors: Exploring boundary conditions. *Journal of Managerial Psychology, 28,* 628–644. doi:10.1108/JMP-10-2012-0314

Groves, K., Vance, C., & Paik, Y. (2014). Linking linear / nonlinear thinking style balance and managerial ethical decision- Jfev. *Journal of Business Ethics, 80,* 305–325. doi:10.1007/sl0551-007-9422-4

Grunes, P., Gudmundsson, A., & Irmer, B. (2013). To what extent is the Mayer and Salovey (1997) model of emotional intelligence a useful predictor of leadership style and perceived leadership outcomes in Australian educational institutions? *Educational Management Administration & Leadership, 42,* 112–135. doi:10.1177/1741143213499255

Guay, R. P. (2013). The relationship between leader fit and transformational leadership. *Journal of Managerial Psychology, 28,* 55–73. doi:10.1108/02683941311298869

Gunkel, M., Schlägel, C., & Engle, R. L. (2014). Culture's influence on emotional intelligence: An empirical study of nine countries. *Journal of International Management, 20,* 256–274. doi:10.1016/j.intman.2013.10.002

Guyatt, G. H., Oxman, A. D., Kunz, R., Vist, G. E., Falck-Ytter, Y., & Schünemann, H. J. (2008). What is "quality of evidence" and why is it important to clinicians? *BMJ, 336,* 995-998. doi:10.1136/bmj.39490.551019.BE

Hadley, C. N. (2014). Emotional roulette? Symmetrical and asymmetrical emotion regulation outcomes from coworker interactions about positive and negative work events. *Human Relations, 67,* 1073-1094. doi:10.1177/0018726714529316

Hancock, J. I., Allen, D. G., Bosco, F. a., McDaniel, K. R., & Pierce, C. a. (2013). Meta-analytic review of employee turnover as a predictor of firm performance. *Journal of Management, 39,* 573–603. doi:10.1177/0149206311424943

Harwell, M. R. (2011). Research design: Qualitative, quantitative, and mixed methods. In C. Conrad & R.C. Serlin (Eds.). *The Sage handbook for research in education: Pursuing ideas as the keystone of exemplary inquiry* (2nd ed.). Thousand Oaks, CA: Sage.

Hassan, S. A., & Shabani, J. (2013). The mediating role of emotional intelligence between spiritual intelligence and mental health problems among Iranian adolescents. *Psychological Studies, 58,* 73–79. doi:10.1007/s12646-012-0163-9

Hayes, J. M., & O'Reilly, G. (2013). Psychiatric disorder, IQ, and emotional intelligence among adolescent detainees: A comparative study. *Legal and Criminological Psychology, 18,* 30–47. doi:10.1111/j.2044-8333.2011.02027.x

Hemphill, J. F. (2003). Interpreting the magnitudes of correlation coefficients. *American Psychologist, 58,* 78–79. doi:10.1037/0003-066X.58.1.78

Hess, J. D., & Bacigalupo, A. C. (2011). Enhancing decisions and decision-making processes through the application of emotional intelligence skills. *Management Decision, 49,* 710–721. doi:10.1108/00251741111130805

High Performing Systems. (2012). *Emotional Intelligence Feedback Booklet.* Watkinsville, GA: High Performing Systems, Inc. Retrieved from www.hpsys.com

Howell, C., Cox, S., Drew, S., Guillemin, M., Warr, D., & Waycott, J. (2015). Exploring ethical frontiers of visual methods. *Research Ethics, 10*, 208–213. doi:10.1177/1747016114552685

Huang, L., & Paterson, T. A. (2014). Group ethical voice : Influence of ethical leadership and impact on ethical performance. *Journal of Management, XX*, 1–28. doi:10.1177/0149206314546195

Humphrey, R. H., Ashforth, B. E., & Diefendorff, J. M. (2015). The bright side of emotional labor. *Journal of Organizational Behavior, 36,* 749–769. doi:10.1002/job.2019

Hutchinson, M., & Hurley, J. (2013). Exploring leadership capability and emotional intelligence as moderators of workplace bullying. *Journal of Nursing Management, 21,* 553–562. doi:10.1111/j.1365-2834.2012.01372.x

Institute for Digital Research and Education. (n.d). *How is effect size used in power analysis?* Retrieved from

http://www.ats.ucla.edu/stat/mult_pkg/faq/general/effect_size_power/effect_size_power.htm

Jain, A. K., Giga, S. I., & Cooper, C. L. (2013). Stress, health and well-being: the mediating role of employee and organizational commitment. *International Journal of Environmental Research and Public Health, 10*, 4907–4924. doi:10.3390/ijerph10104907

Jakupov, S., Altayev, J., Slanbekova, G., Shormanbayeva, D., & Tolegenova, A. (2014). Experimental research of emotional intelligence as the factor of success rate of modern person. *Procedia - Social and Behavioral Sciences, 114*, 271–275. doi:10.1016/j.sbspro.2013.12.697

Johar, S. S. H., Shah, I. M., & Bakar, Z. A. (2012). The impact of emotional intelligence towards relationship of personality and self-esteem at workplace. *Procedia - Social and Behavioral Sciences, 65*(ICIBSoS), 150–155. doi:10.1016/j.sbspro.2012.11.104

Johnson, J. S. (2015). Qualitative sales research: An exposition of grounded theory. *Journal of Personal Selling & Sales Management, 35*, 262–273. doi:10.1080/08853134.2014.954581

Joseph, D. L., Jin, J., Newman, D. A., Boyle, E. H. O., Joseph, D. L., & Boyle, E. H. O. (2014). Why does self-reported emotional intelligence predict job performance? A meta-analytic investigation of mixed EI. *Journal of Applied Psychology, 100,* 298-342. doi:10.1037/a0037681

Jung, H. S., & Yoon, H. H. (2012). The effects of emotional intelligence on counterproductive work behaviors and organizational citizen behaviors among food

and beverage employees in a deluxe hotel. *International Journal of Hospitality Management, 31,* 369–378. doi:10.1016/j.ijhm.2011.06.008

Jung, H. S., & Yoon, H. H. (2014). Moderating role of hotel employees' gender and job position on the relationship between emotional intelligence and emotional labor. *International Journal of Hospitality Management, 43,* 47–52. doi:10.1016/j.ijhm.2014.08.003

Jupp, V. (2006). *Purposive sampling. The SAGE dictionary of social research methods.* doi:10.4135/9780857020116

Kelloway, E. K., Turner, N., Barling, J., & Loughlin, C. (2012). Transformational leadership and employee psychological well-being: The mediating role of employee trust in leadership. *Work & Stress, 26,* 39–55. doi:10.1080/02678373.2012.660774

Kenett, D. Y., Huang, X., Vodenska, I., Havlin, S., & Stanley, H. E. (2015). Partial correlation analysis: Applications for financial markets. *Quantitative Finance, 15,* 569–578. doi:10.1080/14697688.2014.946660

Killgore, W. D. S., Sonis, L. A., Rosso, I. M., & Rauch, S. L. (2016). Emotional intelligence partially mediates the association between anxiety sensitivity and anxiety symptoms. *Psychological Reports, 118,* 23–40. doi:10.1177/0033294115625563

Killian, K. D. (2012). Development and validation of the emotional self-awareness questionnaire: A measure of emotional intelligence. *Journal of Marital & Family Therapy, 38,* 502–514. doi:10.1111/j.1752-0606.2011.00233.x

Kirkwood, A., & Price, L. (2013). Examining some assumptions and limitations of research on the effects of emerging technologies for teaching and learning in higher education. *British Journal of Educational Technology, 44*, 536–543. doi:10.1111/bjet.12049

Kleinbaum, D., Kupper, L., Nizam, A., & Rosenberg, E. (2013). *Applied regression analysis and other multivariable methods*. Boston, MA: Cengage Learning.

Korkmaz, S., Goksuluk, D., & Zararsiz, G. (2014). MVN: An R package for assessing multivariate normality. *The R Journal, 6*, 151–162. Retrieved from http://journal.r-project.org/index.html

Kuminoff, N. V., Schoellman, T., & Timmins, C. (2015). Environmental regulations and the welfare effects of job layoffs in the United States: A spatial approach. *Review of Environmental Economics and Policy, 9*, 198–218. doi:10.1093/reep/rev006

Laborde, S., Lautenbach, F., Allen, M. S., Herbert, C., & Achtzehn, S. (2014). The role of trait emotional intelligence in emotion regulation and performance under pressure. *Personality and Individual Differences, 57*, 43–47. doi:10.1016/j.paid.2013.09.013

Laschinger, H. K. S., & Fida, R. (2013). A time-lagged analysis of the effect of authentic leadership on workplace bullying, burnout, and occupational turnover intentions. *European Journal of Work and Organizational Psychology, 23*, 739–753. doi:10.1080/1359432X.2013.804646

Lee, J. (Jay), & Ok, C. (2012). Reducing burnout and enhancing job satisfaction: Critical role of hotel employees' emotional intelligence and emotional labor. *International Journal of Hospitality Management, 31,* 1101–1112. doi:10.1016/j.ijhm.2012.01.007

Leisanyane, K., & Khaola, P. P. (2013). The influence of organisational culture and job satisfaction on intentions to leave: The case of Clay brick manufacturing company in Lesotho. *Eastern Africa Social Science Research Review, 29,* 59–76. doi:10.1353/eas.2013.0001

Lepage, J. F., Clouchoux, C., Lassonde, M., Evans, A. C., Deal, C. L., & Théoret, H. (2014). Cortical thickness correlates of socioemotional difficulties in adults with Turner syndrome. *Psychoneuroendocrinology, 44,* 30–34. doi:10.1016/j.psyneuen.2014.02.017

Liden, R. C., Wayne, S. J., Liao, C., & Meuser, J. D. (2014). Servant leadership and serving culture: Influence on individual and unit performance. *Academy of Management Journal, 57,* 1434–1452. doi:10.5465/amj.2013.0034

Liu, R. X., Kuang, J., Gong, Q., & Hou, X. L. (2003). Principal component regression analysis with SPSS. *Computer Methods and Programs in Biomedicine, 71,* 141–147. doi:10.1016/S0169-2607(02)00058-5

Locander, D. A., Mulki, J. P., & Weinberg, F. J. (2014). How do salespeople make decisions? The role of emotions and deliberation on adaptive selling, and the moderating role of intuition. *Psychology & Marketing, 31*, 387-403. doi:10.1002/mar.20

Loh, E. (2012). How and why doctors transition from clinical practice to senior hospital management: a case research study from Victoria, Australia. *The International Journal of Clinical Leadership, 17,* 235-244. Retrieved from http://www.radcliffehealth.com/shop/international-journal-clinical-leadership

Luse, A., Mennecke, B., & Townsend, A. (2012). Selecting a research topic: A framework for doctoral students. *International Journal of Doctoral Studies, 7,* 143–152. Retrieved from http://www.informingscience.org/Journals/IJDS/Overview

Martin-Raugh, M. P., Kell, H. J., & Motowidlo, S. J. (2016). Prosocial knowledge mediates effects of agreeableness and emotional intelligence on prosocial behavior. *Personality and Individual Differences, 90,* 41–49. doi:10.1016/j.paid.2015.10.024

Marzucco, L., Marique, G., Stinglhamber, F., De Roeck, K., & Hansez, I. (2014). Justice and employee attitudes during organizational change: The mediating role of overall justice. *Revue Europeene de Psychologie Appliquee/European Review of Applied Psychology, 64,* 289–298. doi:10.1016/j.erap.2014.08.004

Mathe, K., & Scott-Halsell, S. (2012). The effects of perceived external prestige on positive psychological states in quick service restaurants. *Journal of Human Resources in Hospitality & Tourism, 11,* 354–372. doi:10.1080/15332845.2012.690684

Mathe, K., Scott-Halsell, S., & Roseman, M. (2013). The Role of customer orientation in the relationship between manager communications and customer satisfaction. *Journal of Hospitality & Tourism Research, 40,* 198–209. doi:10.1177/1096348013496278

Mathe, K., & Slevitch, L. (2011). An Exploratory examination of supervisor undermining, employee involvement climate, and the effects on customer perceptions of service quality in quick-service restaurants. *Journal of Hospitality & Tourism Research, 37,* 29–50. doi:10.1177/1096348011413590

Mathe-Soulek, K., Scott-Halsell, S., Kim, S., & Krawczyk, M. (2014). Psychological capital in the quick service restaurant industry: A study of unit-level performance. *Journal of Hospitality & Tourism Research, 11,* 303–314. doi:10.1177/1096348014550923

Maul, A. (2012). The Validity of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) as a measure of emotional intelligence. *Emotion Review, 4,* 394–402. doi:10.1177/1754073912445811

Maulding, W. S., Peters, G. B., Roberts, J., Leonard, E., & Sparkman, L. (2012). Emotional intelligence and resilence as predictors of leadership in school administrators. *Journal of Leadership Studies, 5(4),* 20–30. doi:10.1002/jls

Mawritz, M. B., Mayer, D. M., Hoobler, J. M., Wayne, S. J., & Marinova, S. V. (2012). A trickle-down model of abusive supervision. *Personnel Psychology, 65,* 325–357. doi:10.1111/j.1744-6570.2012.01246.x

Mayer, J.D. (2014*). Personal intelligence: The power of personality and how it shapes our lives.* New York, NY: Scientific America.

Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence, 27,* 267–298. doi:10.1016/S0160-2896(99)00016-1

Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). *Mayer–Salovey–Caruso emotional intelligence test (MSCEIT) user's manual*. p. 43.Toronto, Canada: MHS.

Mayer, J., Salovey, P., & Caruso, D. (2004). Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry, 15,* 197–215. doi:10.1207/s15327965pli1503_02

Mayer, J. D., Salovey, P., & Caruso, D. R. (2008). Emotional intelligence: New ability or eclectic traits? *American Psychologist, 63,* 503–517. doi:10.1037/0003-066X.63.6.503

Mayer, J. D., Salovey, P., & Caruso, D. R. (2012). The Validity of the MSCEIT: Additional Analyses and Evidence. *Emotion Review, 4,* 403–408. doi:10.1177/1754073912445815

Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2001). Emotional intelligence as a standard intelligence. *Emotion, 1,* 232–242. doi:10.1037//1528-3542.1.3.232

Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2003). Measuring emotional intelligence with the MSCEIT V2.0. *Emotion, 3,* 97–105. doi:10.1037/1528-3542.3.1.97

Mayer, J.D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (eds.), *Emotional development and emotional intelligence: Educational Implications* (pp.3-31). New York, NY: Perseus Book Group.

McCusker, K., & Gunaydin, S. (2015). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion, 30,* 537–542. doi:10.1177/0267659114559116

Meeks, D. W., Takian, A., Sittig, D. F., Singh, H., & Barber, N. (2014). Exploring the sociotechnical intersection of patient safety and electronic health record implementation. *Journal of the American Medical Informatics Association, 21*(e1), e28–e34. doi:10.1136/amiajnl-2013-001762

Meisler, G. (2013). Empirical exploration of the relationship between emotional intelligence, perceived organizational justice and turnover intentions. *Employee Relations, 35,* 441–455. doi:10.1108/ER-05-2012-0041

Meisler, G. (2014). Exploring emotional intelligence, political skill, and job satisfaction. *Employee Relations, 36,* 280–293. doi:10.1108/ER-02-2013-0021

Mertens, D. M. (2014). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods*. Thousand Oaks, CA: Sage.

Mertler, C., & Vannatta, R. (2013). *Advanced and multivariate statistical methods: Practical application and interpretation* (5th ed.). Los Angeles, CA: Pyrczak.

MHS. (n.d.). *The Complete EQi Launch Kit*. Retrieved from http://www.mhs.com/

Mishar, R., & Bangun, Y. R. (2014). Create the EQ modelling instrument based on Goleman and Bar-On models and psychological defense mechanisms. *Procedia - Social and Behavioral Sciences, 115*(Iicies 2013), 394–406. doi:10.1016/j.sbspro.2014.02.446

Mitchell, G. (2012). Revisiting truth or triviality: The external validity of research in the psychological laboratory. *Perspectives on Psychological Science, 7,* 109–117. doi:10.1177/1745691611432343

Mohammad, F. N., Lau, T. C., Law, K. A., & Migin, M. W. (2014). Emotional intelligence and turnover intention. *International Journal of Academic Research, 6*(4), 211–220. doi:10.7813/2075-4124.2014/6-4/B.33

Multi-Health Systems. (2011). *Emotional Quotient Inventory v. 2.0 (EQ-i 2.0). User Handbook.* Toronto, ON: Multi-Health Systems, Inc. Retrieved from ei.mhs.com

Multi-Health Systems. (n.d.). *The Complete EQi Launch Kit.* Retrieved from http://www.mhs.com/

Murtaugh, P. A. (2014). In defense of P values. *Ecology, 95,* 611–617. doi:10.1890/13-0590.1

National Statistical Service. (n.d.). *Sample size calculator.* Retrieved from http://www.nss.gov.au/nss/home.nsf/pages/Sample+size+calculator

Ngirande, H., & Timothy, H. (2014). The relationship between leader emotional intelligence and employee job satisfaction. *Mediterranean Journal of Social Sciences, 5*(6), 35-40. doi:10.5901/mjss.2014.v5n6p35

Nielsen, K., & Daniels, K. (2012). Does shared and differentiated transformational leadership predict followers' working conditions and well-being? *The Leadership Quarterly, 23,* 383–397. doi:10.1016/j.leaqua.2011.09.001

NIOSH. (2015). *National services agenda –July 2015: The national occupational research agenda (NORA).* Retrieved from http://www.cdc.gov

Ogunfowora, B. (2014). It's all a matter of consensus: Leader role modeling strength as a moderator of the link between ethical leadership and employee outcomes. *Human Relations, 67, 1467–1490.* doi:10.1177/0018726714521646

Osborne, J. W. (2010). Improving your data transformations : Applying the Box-Cox transformation. *Practical Assessment, Research & Evaluation*, *15*(12), 1–9. Retrieved from http://pareonline.net/pdf/v15n12.pdf

Ötken, A. B., & Cenkci, T. (2012). The impact of paternalistic leadership on ethical climate: The moderating role of trust in leader. *Journal of Business Ethics*, *108*, 525–536. doi:10.1007/s10551-011-1108-2

Pallant, J. (2013). *SPSS survival manual*. New York, NY: McGraw-Hill.

Park, T.-Y., & Shaw, J. D. (2013). Turnover rates and organizational performance: a meta-analysis. *Journal of Applied Psychology*, *98*, 268–309. doi:10.1037/a0030723

Parker, J. D. a, Keefer, K. V, & Wood, L. M. (2011). Toward a brief multidimensional assessment of emotional intelligence: Psychometric properties of the Emotional Quotient Inventory-short form. *Psychological Assessment*, *23*, 762–777. doi:10.1037/a0023289

Perera, H. N., & DiGiacomo, M. (2013). The relationship of trait emotional intelligence with academic performance: A meta-analytic review. *Learning and Individual Differences*, *28*, 20–33. doi:10.1016/j.lindif.2013.08.002

Perreault, D., Mask, L., Morgan, M., & Blanchard, C. M. (2014). Internalizing emotions: Self-determination as an antecedent of emotional intelligence. *Personality and Individual Differences*, *64*, 1–6. doi:10.1016/j.paid.2014.01.056

Peterson, C. H. (2012). The individual regulation component of group emotional intelligence: Measure development and validation. *The Journal for Specialists in Group Work*, *37*, 232–251. doi:10.1080/01933922.2012.686962

Petrovici, A., & Dobrescu, T. (2014). The role of emotional intelligence in building interpersonal communication skills. *Procedia - Social and Behavioral Sciences, 116,* 1405–1410. doi:10.1016/j.sbspro.2014.01.406

Piaw, C. Y., Ishak, A., Yaacob, N. A., Said, H., Pee, L. E., & Kadir, Z. A. (2014). Can multiple intelligence abilities predict work motivation, communication, creativity, and management skills of school leaders? *Procedia - Social and Behavioral Sciences, 116,* 4870–4874. doi:10.1016/j.sbspro.2014.01.1040

Poulou, M. S. (2014). How are trait emotional intelligence and social skills related to emotional and behavioural difficulties in adolescents? *Educational Psychology, 34*, 354-366. doi:10.1080/01443410.2013.785062

Prentice, C., & King, B.E.M. (2013). Impacts of personality, emotional intelligence and adaptiveness on service performance of casino hosts: A hierarchical approach. *Journal of Business Research, 66,* 1637–1643. doi:10.1016/j.jbusres.2012.12.009

Rafiee, M., Kazemi, H., & Alimiri, M. (2013). Investigating the effect of job stress and emotional intelligence on job performance. *Management Science Letters, 3,* 2417–2424. doi:10.5267/j.msl.2013.08.025

Resurrección, D. M., Salguero, J. M., & Ruiz-Aranda, D. (2014). Emotional intelligence and psychological maladjustment in adolescence: A systematic review. *Journal of Adolescence, 37*, 461–72. doi:10.1016/j.adolescence.2014.03.012

Rovai, A. P., Baker, J. D., & Ponton, M. K. (2013). *Social science research design and statistics: A practitioner's guide to research methods and IBM SPSS analysis.* Chesapeake, VA: Watertree Press.

Rogers, K. B., Schröder, T., & Scholl, W. (2013). The affective structure of stereotype content: Behavior and emotion in intergroup context. *Social Psychology Quarterly, 76*, 125–150. doi:10.1177/0190272513480191

Rubio, I. M. (2014). Brief emotional intelligence inventory for senior citizens (EQ-i-M20*). Psicothema, 26,* 524–530. doi:10.7334/psicothema2014.166

Ruck, K., & Welch, M. (2012). Valuing internal communication; management and employee perspectives. *Public Relations Review, 38,* 294–302. doi:10.1016/j.pubrev.2011.12.016

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality, 9,* 185–211. doi:10.2190/DUGG-P24E-52WK-6CDG

Salovey, P., & Mayer, J. (2000). Emotional intelligence. *Imagination, Cognition and Personality, 15,* 341–372. Retrieved from http://baywood.metapress.com

Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior, 80,* 661–673. doi:10.1016/j.jvb.2012.01.011

Schlaerth, A., Ensari, N., & Christian, J. (2013). A meta-analytical review of the relationship between emotional intelligence and leaders' constructive conflict management. *Group Processes & Intergroup Relations, 16,* 126–136. doi:10.1177/1368430212439907

Schokman, C., Downey, L. a., Lomas, J., Wellham, D., Wheaton, A., Simmons, N., & Stough, C. (2014). Emotional intelligence, victimisation, bullying behaviours and

attitudes. *Learning and Individual Differences, 36,* 194–200. doi:10.1016/j.lindif.2014.10.013

Scholl, W. (2013). The socio-emotional basis of human interaction and communication: How we construct our social world. *Social Science Information, 52,* 3–33. doi:10.1177/0539018412466607

Schutte, N. S., & Loi, N. M. (2014). Connections between emotional intelligence and workplace flourishing. *Personality and Individual Differences, 66,* 134–139. doi:10.1016/j.paid.2014.03.031

Sheldon, O. J., Dunning, D., & Ames, D. R. (2014). Emotionally unskilled, unaware, and uninterested in learning more: Reactions to feedback about deficits in emotional intelligence. *The Journal of Applied Psychology, 99,* 125–137. doi:10.1037/a0034138

Shipman, M. D. (2014). *The limitations of social research.* New York, NY: Routledge.

Siddiqui, R., & Hassan, A. (2013). Impact of emotional intelligence on employees turnover rate in FMCG organizations. *Pakistan Journal of Commerce and Social Sciences, 7,* 394–404. Retrieved from http://www.jespk.net

Singleton, R., & Straits, B. (2010). *Approaches to social research* (5th ed.). New York, NY: Oxford University Press.

Simon, M. K. & Goes, J. (2013). *Dissertation and scholarly research: Recipes for success*. Seattle, WA: Dissertation Success.

Smith, J. A. (2015). *Qualitative psychology: A practical guide to research methods.* Thousand Oaks, CA: Sage.

Smollan, R. K. (2013). Trust in change managers: the role of affect. *Journal of Organizational Change Management, 26,* 725–747. doi:10.1108/JOCM-May-2012-0070

Smollan, R., & Parry, K. (2011). Follower perceptions of the emotional intelligence of change leaders: A qualitative study. *Leadership, 7,* 435–462. doi:10.1177/1742715011416890

Spanos, A. (2014). Recurring controversies about P values and confidence intervals revisited. *Ecology, 95*, 645–651. doi:10.1890/13-1291.1

Stangor, C. (2014). *Research methods for the behavioral sciences.* Belmont, CA: Cengage Learning.

Stanimirovic, R., & Hanrahan, S. (2012). Examining the dimensional structure and factorial validity of the Bar-On Emotional Quotient Inventory in a sample of male athletes. *Psychology of Sport and Exercise, 13*(1), 44–50. doi:10.1016/j.psychsport.2011.07.009

Stein, S. J., Papadogiannis, P., Yip, J. a., & Sitarenios, G. (2009). Emotional intelligence of leaders: A profile of top executives. *Leadership & Organization Development Journal, 30,* 87–101. doi:10.1108/01437730910927115

Sternberg, R. J. (1985). *Beyond IQ: A triarchic theory of human intelligence*. New York, NY: Cambridge University Press.

Tabachnick, B., & Fidell, L. (2014). *Using multivariate statistics* (6th ed.). Harlow, England: Pearson.

Tabatabaei, S., Jashani, N., Mataji, M., & Afsar, N. A. (2013). Enhancing staff health and job performance through emotional intelligence and self-efficacy. *Procedia - Social and Behavioral Sciences, 84,* 1666–1672. doi:10.1016/j.sbspro.2013.07.011

Tang, T. W., & Tang, Y. Y. (2012). Promoting service-oriented organizational citizenship behaviors in hotels: The role of high-performance human resource practices and organizational social climates. *International Journal of Hospitality Management, 31,* 885–895. doi:10.1016/j.ijhm.2011.10.007

Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research, 1*, 77–100. doi:10.1177/2345678906292430

Teng, C. C., & Chang, J. H. (2013). Mechanism of customer value in restaurant consumption: Employee hospitality and entertainment cues as boundary conditions. *International Journal of Hospitality Management, 32*, 169–178. doi:10.1016/j.ijhm.2012.05.008

Thai, H. T., Mentre, F., Holford, N. H., Veyrat-Follet, C., & Comets, E. (2014). Evaluation of bootstrap methods for estimating uncertainty of parameters in nonlinear mixed-effects models: a simulation study in population pharmacokinetics. *Journal of Pharmacokinetics and Pharmacodynamics, 41*, 15–33. doi:10.1007/s10928-013-9343-z

Thorndike, E. L. (1920). Intelligence and its uses. *Harpers Monthly,* 227-235. Retrieved from http://harpers.org

Titrek, O., Polatcan, M., Zafer Gunes, D., & Sezen, G. (2014). The relationship among emotional intelligence (EQ), organizational justice (OJ), organizational citizenship

behaviour (OCB). *International Journal of Academic Research, 6,* 213–220. doi:10.7813/2075-4124.2014/6-1/B.30

U. S. Census Bureau. (2012). *Accommodation and food services. Economic Census: Industry Snapshots.* Retrieved from http://thedataweb.rm.census.gov/

U. S. Department of Agriculture. (n.d.). *Market segments. Food market and prices: Food service industry*. Retrieved from http://ers.usda.gov

U.S. Department of Health & Human Services. (1979). *The Belmont Report.* Retrieved from http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html

U. S. Department of Labor. (2014a). *Job opening and labor turnover survey.* Bureau of Labor Statistics. Retrieved from http:www.bls.gov

U. S. Department of Labor. (2014b). *Unemployment insurance weekly claims: Seasonally adjusted data. News Release, 05/22*. Retrieved from http://www.dol.gov/

U. S. Department of Labor. (2016). *Job openings and labor turnover survey. Total Separation.* Retrieved from http://www.dol.gov/

U. S. Department of Labor. (n.d.). *BLS information: Glossary. Bureau of Labor Statistics.* Retrieved from http://www.bls.gov

U.S. Department of Health and Human Services. (2009). *Human Subjects Research* (45 CFR 46), Code of Federal Regulations. Retrieved from http://whttp//www.hhs.gov/ohrp/policy/ohrpregulations.pdf

U.S. Department of Health and Human Services, FDA. (1989). *Payment to research subjects - Information sheet: Guidance for institutional review boards and clinical*

investigators. Retrieved from http://www.fda.gov/RegulatoryInformation/Guidances/ucm126429.htm

Utami, A. F., Bangun, Y. R., & Lantu, D. C. (2014). Understanding the Role of emotional intelligence and trust to the relationship between organizational politics and organizational commitment. *Procedia - Social and Behavioral Sciences, 115*(Iicies 2013), 378–386. doi:10.1016/j.sbspro.2014.02.444

Valpine, P. D. (2014). The common sense of P values. *Ecology, 95*, 617–621. doi:10.1890/13-1271.1

Van Kleef, G. A. (2014). Understanding the positive and negative effects of emotional expressions in organizations: EASI does it. *Human Relations, 67*, 1145-1164 doi:10.1177/0018726713510329

Vandenberghe, C., Bentein, K., & Panaccio, A. (2014). Affective commitment to organizations and supervisors and turnover : A role theory perspective. *Journal of Management, XX*, 1–28. doi:10.1177/0149206314559779

Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Quarterly, 37*, 21–54. Retrieved from http://www.misq.org/

Vidyarthi, P. R., Anand, S., & Liden, R. C. (2014). Do emotionally perceptive leaders motivate higher employee performance? The moderating role of task interdependence and power distance. *The Leadership Quarterly, 25*, 232–244. doi:10.1016/j.leaqua.2013.08.003

Vogelgesang, G. R., Leroy, H., & Avolio, B. J. (2013). The mediating effects of leader integrity with transparency in communication and work engagement/performance. *The Leadership Quarterly, 24,* 405–413. doi:10.1016/j.leaqua.2013.01.004

Waldman, D. A., Carter, M. Z., & Hom, P. W. (2012). A Multilevel investigation of leadership and turnover behavior. *Journal of Management, XX,* 1–21. doi:10.1177/0149206312460679

Walter, F., Cole, M. S., der Vegt, G. S. Van, Rubin, R. S., & Bommer, W. H. (2012). Emotion recognition and emergent leadership: Unraveling mediating mechanisms and boundary conditions. *The Leadership Quarterly, 23,* 977–991. doi:10.1016/j.leaqua.2012.06.007

Walter, F., Cole, M. S., & Humphrey, R. H. (2011). Emotional Intelligence: Sine qua non of leadership or folderol? *Academy of Management Perspectives, 25,* 45–59. doi:10.5465/AMP.2011.59198449

Walter, F., & Scheibe, S. (2013). A literature review and emotion-based model of age and leadership: New directions for the trait approach. *Leadership Quarterly, 24,* 882–901. doi:10.1016/j.leaqua.2013.10.003

Wan, H. C., Downey, L. A., & Stough, C. (2014). Understanding non-work presenteeism: Relationships between emotional intelligence, boredom, procrastination and job stress. *Personality and Individual Differences, 65,* 86–90. doi:10.1016/j.paid.2014.01.018

Wang, X., Ma, L., & Zhang, M. (2014). Transformational leadership and agency workers' organizational commitment: The mediating effect of organizational justice

and job characteristics. *Social Behavior and Personality, 42*, 25–36. doi:10.2224/sbp.2014.42.1.25

Webb, C. A., Schwab, Z. J., Weber, M., DelDonno, S., Kipman, M., Weiner, M. R., & Killgore, W. D. S. (2013). Convergent and divergent validity of integrative versus mixed model measures of emotional intelligence. *Intelligence, 41*(3), 149–156. doi:10.1016/j.intell.2013.01.004

Wechsler, D. (1943). Non-intellective factors in general intelligence. *The Journal of Abnormal and Social Psychology, 38*, 101–103. doi:10.1037/h0060613

Wechsler, D. (1958). *The measurement and appraisal of adult intelligence. (4th ed.), The Classification of Intelligence* (pp. 38-48). Baltimore, MD: Williams & Wilkins. doi:10.1037/11167-003

Weerdt, M. De, & Rossi, G. (2012). The Bar-On emotional quotient inventory (EQ-i): Evaluation of psychometric aspects in the Dutch speaking part of Belgium. *INTECH Open Access Publisher*. Retrieved from http://cdn.intechopen.com/pdfs-wm/36451.pdf

Wojciechowski, J., Stolarski, M., & Matthews, G. (2014). Emotional intelligence and mismatching expressive and verbal messages: A contribution to detection of deception. *PloS One, 9,* e92570. doi:10.1371/journal.pone.0092570

Wolfe, K., & Kim, H. J. (2013). Emotional intelligence, job satisfaction, and job tenure among hotel managers. *Journal of Human Resources in Hospitality & Tourism, 12,* 175–191. doi:10.1080/15332845.2013.752710

Yuan, L., Tan, X., Huang, C., & Zou, F. (2014). Mediating effect of job satisfaction on the relationship between emotional intelligence and perceived general health. *Social Behavior and Personality, 42,* 1057–1068. doi:10.2224/sbp.2014.42.7.1057

Zachariadis, M., Scott, S., & Barrett, M. (2013). Methodological implications of critical realism for mixed-methods research. *MIS Quarterly, 37,* 855–879. Retrieved from http://www.misq.org/

Zar, J. (1984). *Biostatistical analysis* (2nd ed.). London, England: Prentice-Hall.

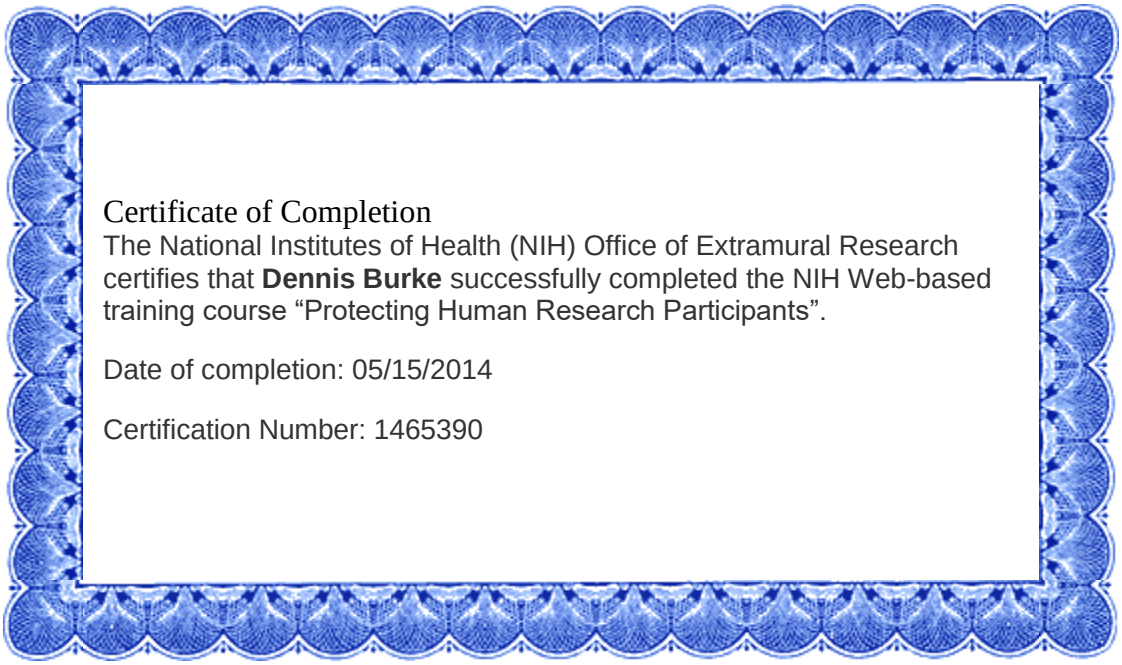
Zar, J. (2010*). Biostatistical analysis* (5th ed.). London, England: Prentice-Hall.

Zarch, Z. N., Marashi, S. M., & Raji, H. (2014). The relationship between emotional intelligence and marital satisfaction: 10-Year outcome of partners from three different economic levels. *Iranian Journal of Psychiatry, 9,* 188–196. Retrieved from http://ijps.tums.ac.ir

Zavala, M. A., & Lopez, I. (2012). Adolescents in psychosocial risk situation: What is the role of emotional intelligence? *Behavioral Psychology/Psicologia Conductual, 20,* 59–75. Retrieved from http://psicologias.uprrp.edu/

Zyphur, M. J., Zammuto, R. F., & Zhang, Z. (2016). Multilevel latent polynomial regression for modeling (in)congruence across organizational groups: The case of organizational culture research. *Organizational Research Methods, 19,* 53–79. doi:10.1177/1094428115588570

Appendix A: NIH Certificate of Completion (Protecting Human Research Participants Training)



Appendix B: Researcher's Assessment Qualification Certificate

EQ-i 2.0™ assess. predict. perform.

EQ 360 assess. predict. perform.

CERTIFICATE OF COMPLETION

This is to certify that

Dennis V. Burke

Has successfully completed the **EQ-i 2.0 / EQ 360 Certification Program**

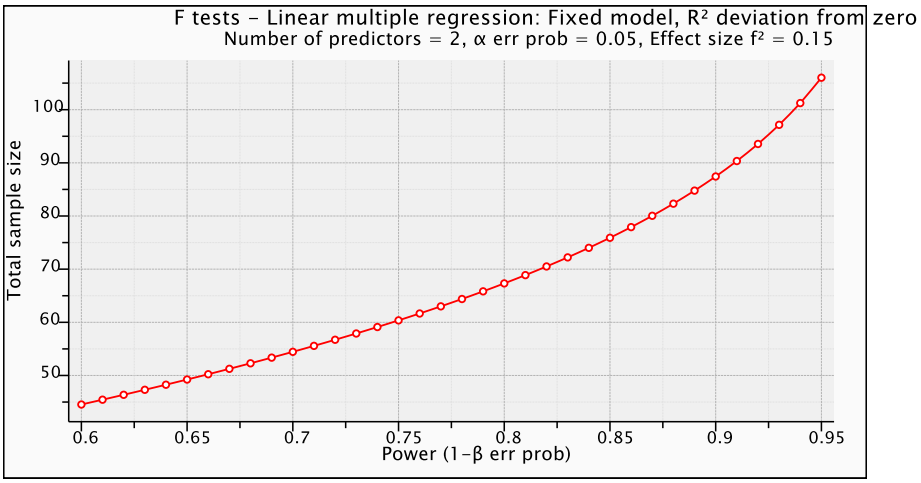
Facilitated by High Performing Systems Inc. on behalf of MHS Inc.
and is now qualified to purchase and use the EQ-i 2.0 / EQ 360

COMPLETED: 7/15/2015

MHS

Steven J. Stein
Chief Executive Officer
Multi-Health Systems Inc.

Appendix C: Power as a Function of Sample Size



Appendix D: Permission to Use EQ-i 2.0 Model and Tables and Reprint

On Oct 5, 2015 1:49 PM, "Betty Mangos" wrote:

Hello Dennis,

I hope that you are well.

Thank you for sending me the completed Permissions Application Form, as well as the document outlining what you would like to reproduce.

I have made a few minor changes in the reference lines. Please replace your reference lines with these.

Other than this, you are okay to proceed.

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Appendix E: EQ-i 2.0 Model of Emotional Intelligence.

Table 1. EQ-i 2.0 Scores by Racial/Ethnic Group in the Normative Sample

Table 2. Frequencies and Descriptive Statistics of Inconsistency Index Scores in EQ-i 2.0 Normative and Random Samples

Table 3. EQ-i 2.0 Scores in Corporate Leaders

Table 4. Standardization, Reliability, and Validity Tables. Correlations among EQ-i 2.0 Subscales

Thank you,
Betty

www.mhs.com

Appendix E: EQ-i 2.0 Model of emotional intelligence

Appendix F: Permission to Use EQ-i 2.0 Questionnaire

Alysha Liebregts
Attachments|| Jun 4, 2015 || 12:01 PM (2 hours ago)
to me
Hello Dennis,

When citing the tool, you can use:

EQ-i 2.0 ® Copyright © 2012 Multi-Health Systems Inc. All rights reserved.
MHS is the owner (author) and publisher of the EQ-i 2.0.

Please find attached a sample of the EQ-i 2.0 items, which you can use; it is watermarked for use in your documents you hand in for evaluation. You can submit this for IRB approval if required.

Thanks

Alysha Liebregts
Partner Relations Consultant
Talent Assessment