Emotional Intelligence: A Leader's Impact on Productivity in a Distribution Environment

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ABSTRACT

Emotional Intelligence: A Leader's Impact on Productivity in a Distribution

Environment

by Herbert Callahan

Purpose: The purpose of this qualitative study was to explore and describe the impact of a supervisor's Emotional Intelligence on the performance of the associates that work for them within a distribution environment. The research design will include assessing a supervisor's levels of emotional intelligence through the administration of the Emotional Intelligence Appraisal®–Me Edition and will include the gathering of data through semi-structured interviews from identified associates that work with them.

Methodology: Convenience purposeful sampling was used to identify supervisors within a distribution environment. A qualitative, multiple case study approach was used where feedback gathered through semi structured interviews with associates and the results of the Emotional Intelligence Appraisal®–Me Edition administered to supervisors was used to explore and describe the impact the emotional intelligence of the supervisors has on the associate's performance.

Findings: On average, the associates interviewed identified the attributes of emotional intelligence, when displayed by their supervisor, as having a significant impact on their performance. The domains of self – awareness, self – management, and social awareness were identified as having either a significant impact or some impact on their performance. Relationship management behaviors were identified as having the most direct and positive impact on associate's daily performance within a distribution center.



Conclusions: Supervisors that display emotionally intelligent behaviors, such as self-awareness, self-management, social awareness, and relationship management, when working with associates, within a distribution environment, have a positive impact on the associate's daily performance.

Implication for Action: Those responsible for training and within an organization, should develop programs that help identify and develop levels of emotional intelligence amongst the supervisors. They should ensure there is funding to create an ongoing means of training and development that allows its leaders to develop the appropriate occupational skillsets. In addition to providing training, organizations should ensure that there is a method of evaluating the environment, such as taking environmental surveys, and should incorporate behavioral assessments that helps identify how supervisors will respond in conflict or how they positively engage associates.



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CHAPTER I: INTRODUCTION

Supply and demand is perhaps one of the most fundamental concepts of economics and it is the backbone of our economy (Bergman, 2013; Heakal, 2015). Supply refers to how much of a certain product or service is available for people to purchase. Demand refers to how many people want to buy that good or service ("Supply & Demand," 2015). The supply-and-demand model works when there is a high degree of competition amongst buyers and sellers in the market allowing bidding for the product or service to take place. Buyers will bid against each other causing the price to rise, while sellers bid against each other causing the price to lower. In this model, every product that reaches an end user passes through numerous touch points or organizations on its way from the provider of the raw material to the end user or consumer as a finished product.

These organizations and their efforts to get raw material to an end product are referred to collectively as the supply chain ("Definition," 2015; Handifield, 2011). This chain of touch points or organizations can be very complex and include several elements such as; production planning, material sourcing, transportation management, distribution center management, and demand management (SAP, 2007; Scott & Oldfield, 2004). As product moves through the supply chain, how effective the product is handled and moved between manufacturing plants and distributions centers (DCs) is critical in today's competitive environment (Snyder & Berger, 2003). For many retailers DCs are a vital cog within the supply chain and the logistics costs associated with the effective operation of the DC can account for approximately 25% of total operational costs (Richards, 2014; Sternbeck & Kuhn, 2014). To ensure competitive advantage, retailers must ensure there are effective processes and effective cost containment within their logistics processes and



distribution centers. This need to drive competitive advantage through performance has caused organizations to develop complex measurement systems, allowing them to track the use and availability of their resources.

In today's DCs, enormous amounts of data is collected in order to track performance (Allais, 2010). This data tracks numerous measurements such as how long the product sits in storage, how often it is moved, and how often new product is brought in, how fast and how much product can get from a storage position in a warehouse to the dock of the customer (Ecklund, 2010; Warehouse Education and Research Council [WERC], 2007). Other measurements track things such as where the product is placed within a warehouse, the travel time to retrieve the product, and the expected amount of incoming product (Ecklund, 2010; WERC, 2007).

Which metrics and measures are used within a DC is influenced by many different variables such as customer preference, type of product or temperature of product just to name a few (Ecklund, 2010). WERC (2007) released a warehousing best practices guide that discussed eight different processes and identified 44 measurements that will help increase operational effectiveness and productivity. In 2008, another report identifies 48 additional metrics that should be used when attempting to increase productivity (Fraser, Manrodt, & Vitasek, 2008). All of these measures and variables are tracked in order to increase productivity while decreasing operational costs (Liviu, Ana-Maria, & Emil, 2009).

This research reveals that there is an abundance of measures within a warehouse environment that provide measures of productivity (Allais, 2010; Ecklund, 2010; WERC, 2007) and that there is a strong desire to increase productivity. A recent study of



managers within a warehouse environment shows that the majority of these managers, nearly 67%, have stated a desire to increase productivity (Fraser, Manrodt, & Vitasek, 2008).

Background

Measuring Productivity

Productivity is commonly defined as a ratio between the volume of input and the volume of output ("Labor," 2015; "Productivity," 2015; "Workplace," 2004). Common inputs are things such as labor and capital and common outputs can range from things such as Gross Domestic Product to earnings before interest, taxes, depreciation, and amortization to a universal measure of "output per hour of labor" ("Productivity," 2015). To ensure organizations are productive, complex measurement systems are used in order to measure performance. This allows organizations to quantify activity and to determine what is working and what is not (Turdean, Liviu, & Emil, 2009).

In a DC, these productivity measures are primarily mathematical equations that measure the manipulation or physical state of the product and the physical activity of the associate. Although the literature shows that the associate is a primary variable in the majority of the most common measurements (Neely, Kennerley, & Adams, 2002), the primary focus in the productivity equation has been on variables that influence the product and very little focus is placed on what influences the associate.

There are many variables that impact the performance of the associate (Root, n.d.). One such variable is the leadership ability of the associate's supervisors (Mishra & Mohapatra, 2010; Whiteoak & Manning, 2012). Although there is an abundance of literature that discusses the impact of leadership on an organization's results (Goleman,



Boyatzis, & McKee, 2002; Tsui, Fu, Liu, & Li, 2010), there is a gap in the literature when looking for a direct relationship between a leaders impact on an associate and the associate's measured performance (Feyerherm & Rice, 2002).

One leadership variable that is growing as a management tool is Emotional Intelligence (EI) (Goleman, et al., 2002; Webb, 2005). There have been many definitions as this newer intelligence has evolved. Salovey and Mayer (1990) define EI as, "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990, p. 5). Another definition discusses the need to act responsibly, to treat others with dignity, and its use in the workplace,

Emotional intelligence is a confluence of developed skills and abilities to: (1) accurately know oneself, feel valuable, and behave responsibly as a person of worth and dignity, (2) establish and maintain a variety of effective, strong, and healthy relationships, (3) get along and work well with others, and (4) deal effectively with the demands and pressure of daily life and work (Nelson & Low, 1998, p.23).

Although the use of EI seems to be growing as a management tool and is believed to increase performance and productivity there appears to be a lack of research supporting that belief (Kirby & Lam, 2002; Koman & Wolff, 2007).

If managers are expected to continually improve efficiency and productivity, then studying the impact that a supervisor's EI has on the productivity of their associates appears to be justified by the lack of research.



Follower Alignment

A goal in any effective organization is to develop aligned relationships between associates and their supervisors. This alignment has shown to lead to organizational success (Hurst, Walumbwa, Aryee, Butarbutar, & Hui Chen, 2014; Werther, 2003). In creating this alignment, much has been written about the success among leaders and their use of EI. Specifically, authors have written about how the personal attributes of a leader impact a work force (Hoffman et al., p. 779). Often it is the visibility of the personal attributes of a leader that influence follower behavior. This can be either positive or negative. If a follower is aligned and supportive of the behavior they see they tend to perform at a higher level or perform "extra role" actions (Cartwright and Pappas, 2008, p.149). When a follower is not aligned with the behavior of the leader, or of the organization, this can often increase their risk of leaving or increase their level of disengagement (Cartwright and Pappas, 2008, p. 149).

Research shows that followers are more aligned and supportive of organizational change when their leaders display openness and display attributes of EI (Hurst, et al., 2014; Werther, 2003). This not only impacts alignment between leader/organization and follower but also can increase the level of engagement in the associate. This engagement can result in a more highly performing and effective team (McCann, 2012, p. 23). Salovey and Mayer (1990) have stated that individuals who display EI "...should be perceived as genuine and warm by others, while individuals lacking these skills should appear oblivious and boorish" (p. 195). According to Oreg and Bersum (2011), these studies of alignment and reaction to EI have shown a direct correlation to follower's attitudes towards turnover, job satisfaction and psychological well-being (Oreg and



Bersum, 2011, p. 628). Alignment with the personal attributes of leaders and their behaviors have a significant impact on the work force (Hoffman, Piccolo, Bynum, & Sutton, 2011).

Measuring Emotional Intelligence

Much has been written about the quantitative value of EI in the workplace (Cherniss & Goleman, 2001). This includes studies on the individual success rates when EI is measured during the hiring process (Zeidner et al., 2004). These studies estimate that EI can be responsible for success rates of 85% to 90% of leaders (Zeidner et al., 2004). Goleman (1998) found that star performers in high performing organizations have more EI and, that EI in those organizations is twice as important than technical skill.

Additionally, EI has been found to influence the climate of an organization and that organizational climate can account for 20% to 30% of organizational performance (Cherniss & Goleman, 2001). As with measures of productivity and effectiveness, EI can be measured.

Many organizations use tools such as the Mayer, Salovey, and Caruso Emotional Intelligence test or MSCEIT to measure levels of EI (Cartwright and Pappas, 2008). The MSCEIT and subsequent versions of tests like it primarily measure EI using the ability model approach. These tests measure how the individual would react in a scenario where EI is tested. Tests associated with the mixed model approach differentiate in that they not only test reactions to a scenario that may cause an emotional response, but also test the management of those reactions (Zeidner et al., 2004). These tests measure the EI within the individual but still fail to measure the specific impact on productivity in a collective



work environment. What these test do provide is predictive validity as to the performance and results achieved by the individual (Zeidner et al., 2004).

Occupational Environments

Although most research discusses the positive impact of EI in a very broad perspective there is little research that discusses where it can best be applied or have the most measureable impact (Koman & Wolff, 2007). In an academic environment, studies have shown that in roles where there is an abundance of feedback, clear roles, and supportive leadership, employees are more satisfied and motivated. That same study showed when there is work overload, lack of feedback, little supervisory support, and in general little EI being displayed by the leader, then the environment becomes demotivating (Kumar et al., 2012). In highly repetitive jobs where there is little personal interaction and lots of mechanical motion—such as machinist and seamstresses—EI may have less of an impact on productivity, although still important. In occupations where there is high interaction with customers that can become emotional or where there is a need for "emotional labor" (Cartwright & Pappas, 2008), then EI is a strong predictor of success.

In a distribution environment, the rate of product turnover, customer input, and an ever-changing competitive environment, the interaction between a supervisor and warehouseman is instrumental in ensuring effective operations (Brockman, 1999).

According to the WERC (1999), the daily interaction and attitude of a supervisor either directly or indirectly in a warehouse environment impacts the performance, productivity and effectiveness of associates.



Gaps in the Literature

Productivity in the workplace has also been studied for many years. In the 1920's The Western Electric Team conducted a study measuring different variables and watched their impact on the employees. These studies became known as the "Hawthorne studies" (Porter, 2012) and at the end of the study they determined that just the act of watching employees increased their productivity.

Similarly, it is believed that simply holding an associate to higher expectations may lead to increased productivity. This theory, known as the Pygmalion effect, was first introduced by Sterling Livingston in 1969. The Pygmalion effect can be found being used in many environments from business to academia where it is believed to influence student achievement (Daido & Itoh, 2005; Livingston, 1969).

The impact EI has on others is more difficult to measure and observe (Koman & Wolff, 2007). This review focused on the role of EI in the work place, how it is measured, where it may be most effective, and more specifically on productivity or employee engagement that may lead to increased productivity. Although there are an abundance of studies that have been done that measure the impact of EI, much of the research has primarily measured qualitative factors such as job satisfaction and risk of leaving (Jorfi, Yacco, & Shah, 2012; Nikolaou & Tsaousis, 2002).

There is a noticeable gap in the literature in regards to measuring specific performance metrics or any common quantitative measures related to productivity and how they may be influenced by EI.

In many environments where high productivity is a requirement there are many systems and studies that focus on increasing productivity. Processes such as Lean



(Strom, 2013) and Six Sigma (Islam, 2006) have been around for decades and there is a great amount of empirical research that shows there effectiveness on productivity. There is a significant gap in research that studies the impact on EI in environments where high productivity is crucial. Additionally, the majority of the research on EI has been done in regards to the impact or the effectiveness of an individual. There is little research that has been conducted to measure an individual's impact on a collective group of individuals (Koman & Wolff, 2007). Most research will measure qualitative and quantitative behaviors of leaders displaying EI but there is little research that explores the impact that leader's EI may have on the productivity of those associates.

There are additional limitations with the study of EI in that most research has been done measuring leadership and emotional intelligence amongst transformational leaders only. The focus in these studies is often more on the effectiveness of transformational leadership and less on the effectiveness of EI. There is also limited research that just measures EI amongst the "rank and file" of a work force either with working associates or frontline supervisors. These gaps in research make it difficult to draw a conclusion that EI, either displayed by the leader of by the subordinate, has a direct correlation to increased productivity as measured by key performance metrics. There is an opportunity for further study in this area. The literature reviewed for this study has provided effective data that will allow for further research into the qualitative impact EI has on productivity in the workplace.

Statement of the Research Problem

Labor is one of the largest costs in a DC and the expected productivity growth over recent years has been cut in half despite advances in technology (Blinder, 2015;



Gorman, 2016). Productivity in a warehouse is measured as a mathematical equation using numerous metrics to show the effective movement of product (Ecklund, 2010; WERC, 2007). These measurements do not adjust for variances influenced by associate performance. In a warehouse environment, productivity measures are commonly seen as a result of amount of product and the physical activity of the associate. There are other variables that impact performance of the associate that have not been explored as thoroughly. One such variable is the EI of the associate's supervisors. According to Bradberry & Greaves (2009), "nearly 58% of all performance in all job types is impacted by Emotional Intelligence (EI)" (p. 20).

Although EI continues to evolve and become an important management tool, it also has long been debated as to its effectiveness and usefulness in the workplace (Allam, 2011; Zeidner et al., 2004). Researchers argue that although EI results appear to have an impact on performance, that the evidence is limited and contradictory (Zeidner et al., 2004). Additionally, according to Goleman (2011) a study conducted in 1970 showed that many executives felt that showing empathy and emotion would cause conflict in trying to attain organizational goals.

In contrast to research that is dismissive, or unsupportive of the impact of EI, there is a growing amount of research, which argues EI has a larger impact on a leader's individual success, and organizational performance, than general intelligence (Cherniss & Goleman, 2001; Goleman, et al., 2002). Goleman and Boyatzis (2002) believe that building an effective organizational climate is done by understanding the emotions of oneself and those participants within the workforce (Goleman, et al., 2002). According to Whiteoak and Manning (2012), leaders with EI not only perform better but they elicit



better performance out of their subordinates. Crowley (2012) also supported the importance of EI in the workplace by stating that although traditional leadership teaches us, "the best managers are the brainiest and most analytical—intentionally insulated from emotions" (n.p.). However, the companies that will endure are the ones that "accept that both feelings and emotions play an enormous role in driving employee (human) behavior" (n.p.).

The literature shows that even if EI is growing as a management tool that increases performance and productivity, there appears to be a lack of research that supports and quantifies that belief (Kirby & Lam, 2002). In a DC where efficiency and productivity provide competitive advantage, training methods used to increase both focus on the manipulation of the physical state of the product or the physical ability of the associate. Learning more about the relationship between a supervisor's level of EI and its impact on their direct reports could lead to new methods of how to increase both efficiency and productivity in a DC.

If managers are expected to continually improve efficiency and productivity, then studying the impact that a supervisor's EI has on the productivity of their associates is justified by the lack of research.

Purpose Statement

The purpose of this qualitative study was to explore and describe the impact of a supervisor's EI on the productivity of the associates that work for them within a distribution environment. The research design of this study will include identifying supervisors with identifiable levels of EI, through the administration of the Emotional



Intelligence Appraisal®–Me Edition, and then will include the gathering of data through semi-structured interviews from the identified associates that work with them.

Research Questions

- 1. How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?
- 2. What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?
- 3. What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?
- 4. What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?
- 5. What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?

Significance of the Problem

Research shows that performance is impacted by more than just the physical aspects of the environment an associate is working in (Goleman, et al., 2002). Research is beginning to show that EI is essential to effective individual and organizational performance (Cherniss & Goleman, 2001). According to Bradberry & Greaves (2009), "nearly 58% of all performance in all job types is impacted by Emotional Intelligence" (p. 20).

This research implies that employees are exposed to significant amounts of EI in their daily interactions at work and that the supervisor, if practicing effective EI, can have



a significant impact on the performance and subsequently the productivity of their associates (Bowling & Michel, 2011; Bradberry & Greaves, 2009; Deter & Trevino, 2010).

In most work environments, the interactions with immediate supervisors has been shown to be a key influence on associate behavior (Detert & Trevino, 2010).

Specifically, the impact of a supervisor has been shown to influence an associate's behavior in regards to their alignment with organization goals and objectives. Associates generally need to feel a connection or have alignment with the supervisors before they make an emotional commitment to the organization, which will lead to increased engagement and productivity (Bowling & Michel, 2011; Cherniss & Goleman, 2001).

This study will add to the body of knowledge that identifies which metrics drive performance in a warehouse environment by studying the relationship between the emotional intelligence of a supervisor and the productivity of his/hers direct report.

Additionally, this study will address the assertion that EI based leadership may be an important driver of organizational climate and may also have a significant impact on organizational performance (Cherniss & Goleman, 2001). If EI can positively impact productivity, then there is an argument to invest more resources into the training and development of leaders to develop EI.

Definitions

Theoretical Terms

The following theoretical terms are common terms and have been used throughout this study:



Emotions – Scientifically this word has proven to be a challenge to define.

Scientists have been in disagreement for over 100 years as to how to define it. For the purposes of this study we will synthesize numerous dictionary definitions and state that emotions are a conscious mental reaction towards an external variable. Often these reactions are given labels such as joy, anger, sadness, happiness etc., (Cherniss & Goleman, 2001; Salovey & Mayer, 1990).

Emotional Intelligence – A subset of intelligence that involves the ability perceive, express and assimilate emotions within yourself and others, as well as having the ability to discriminate among them to help guide one's actions and the actions of others (Cherniss & Goleman, 2001; Salovey & Mayer, 1990).

Engagement – The connecting of employees to their work in a manner which results in a commitment to the organization and its goals; This commitment leads employees to work with passion and feel a profound connection to their company allowing them to drive innovation and move the organization forward (Kruse, 2012; Saks & Gruman, 2014).

Self-Awareness – The ability to be conscious of and the ability to identify emotions that are taking place within oneself as they happen and the affect they have on one's self and others (Bradberry & Greaves, 2009; Goleman, 1995; Khalili, 2012).

Self-Management – The ability to control feelings so they are used appropriately and effectively in all situations to all people (Bradberry & Greaves, 2009; Cherniss & Goleman, 2001; Goleman, 1998)

Social Awareness – Closely affiliated with empathy this is the ability to understand the emotions and needs of others and responding in an appropriate and



effective manner (Bradberry & Greaves, 2009; Cherniss & Goleman, 2001; Goleman, 1998).

Relationship Management – This is the ability to influence and manage others through the use of one's emotions and the emotions of others (Bradberry & Greaves, 2009; Cherniss & Goleman, 2001; Goleman, 1998).

Leadership – The ability to induce followers to act for certain goals that represent the values and motivation—the wants, needs, aspirations, and expectations—of both leaders and followers (Hickman, 1998)

Operational Terms

The following operational terms are common terms used throughout this study:

Productivity – This is defined as the direct growth or change of output as a result of change to variable inputs (Fried, et al., 2008). For the purposes of this study, it is defined as the effectiveness of a warehouseman in the ability to accurately and effectively locate and select product for delivery to the customer.

Supervisor – The term "supervisor" means any individual having authority, in the interest of the employer, to hire, transfer, suspend, lay off, recall, promote, discharge, assign, reward, or discipline other employees, or responsibly to direct them, to adjust their grievances, or effectively to recommend such action, if in connection with the foregoing requires the use of independent judgment ("Supervisor," 2015).

Warehouse – This a facility within the supply chain where product is stored and consolidated for the customer in order to reduce transportation cost, provide economies of scale in purchasing or provide value-added services and shorten response time (Ramaa, Subramanya, & Rangaswamy, 2012).



Warehouseman – A person who works in a warehouse, usually selecting and packing goods to be delivered to the customer or end user. This individual is directed by a supervisor and uses multiple methods to select and load product on to a pallet and then on to a trailer for delivery ("Warehouseman," 2015).

Warehouse Management System (WMS) – A software application that many distribution organizations use to supports the day-to-day operations in a warehouse. These systems enable warehouse managers to more effectively plan and use warehouse resources, which may include labor, storage, material handling equipment, and the building. WMSs often carry enough data to create productivity reports which greatly assist in labor management. Since productivity is measured differently from one warehouse operation to another, there may be different productivity reporting metrics used for different operations (Benson, 2015; Piasecki, n.d.).

Performance Standard – A measurement used within a warehouse or distribution center that measures the productivity and effectiveness of a warehouseman. The standards often include measures of product handling, cost per unit, space utilization, damage, inventory, etc. (Ecklund, 2010).

Supply Chain – A grouping of key business processes that begin with providers of raw materials to end users. These services include suppliers that provide products, services, information and value added services for end users, customers, and stakeholders (Sillanpaa, 1999).

Delimitations

There are several delimitations to this study that may limit the ability of its findings to be generalized to a larger population:



- Population is Industry specific Based on convenience and understanding of the sample, distribution will be further broken down into the subgroup Food Distribution.
- 2. Sample is skillset specific Based on the accessibility of Key Performance Indicators (KPIs) within a warehouse environment, the sample will study the productivity of associates specifically within the warehouse environment of a distribution company.
- Location Based on location of the author and the location of the Ports of Los
 Angeles and Long Beach, the study will include food distribution companies
 located in the Southern California area.

Organization of the Study

The remainder of the study will be organized into four chapters. Chapter II will include a review of the literature that will help provide a framework for the research conducted. Chapter III will outline the rationale for the methodology used for this study. Chapter III will also discuss the data collection process along with the population and site selection process. Chapter IV will provide discussion on the data collected, the analysis of the findings, and the relationship to the research questions. Finally, Chapter V will contain a summary, discuss the implications of the findings, and make recommendations for future research.



CHAPTER II: LITERATURE REVIEW

The purpose of this research was to assess the relationship between a supervisor's level of EI —as perceived by their direct reports through semi-structured interviews (Patten, 2012, p. 153), and measured by the Emotional Intelligence Appraisal®–Me Edition—and the productivity of the associates that work for that supervisor as measured through traditional productivity measures found within a distribution center.

This chapter reviews the historic literature relating to EI and productivity within a distribution environment. EI, and its impact, is examined through a review of the history of EI, the major contributors and theorists within the field of EI, and through a review of different means in which to measure EI. This chapter synthesizes the literature regarding productivity within a distribution environment and EI (see Appendix A for the synthesis matrix).

Productivity is introduced by providing an overview of the many segments that make up the supply chain and through a review of numerous concepts that assist in explaining the importance of effectiveness in what is known as supply chain management (SCM). These concepts include theories known as the "beer game" and "bullwhip effect" (MacDonald, Frommer, & Karaesmen, 2013; Meyer & Purvanova, 2013).

Logistics and Supply Chain Management

Through the concept of supply and demand, consumers drive the need for effective Logistics and SCM. Logistics and SCM are the mechanisms through which supply and demand are actualized. The terms Logistics and SCM are often confused with each other, but both are instrumental in any industry where raw material is turned into a product, and delivered to an end user ("Logistics," 2012). The primary difference



between the two is that logistics often refers to the processes within a single entity in which a product enters the organization, travels through the organization and its processes, and is ready for distribution at the other side of the organization (Hugos, 2003; "Logistics", 2012; Mentzer, DeWitt, Keebler, Min, Nix, Smith, & Zacharia, 2001). SCM includes the effective interactions between all the organizations that are involved in getting raw materials turned into products and or services for the ultimate consumption of the consumer ("Logistics," 2012; Lummus & Vokurka, 1999; Mentzer et al., 2001).

According to Waters (2010), in recent years, the processes involved in Logistics and SCM used to satisfy the needs of the customer have become critical for any organization. Variances identified between customer demand and what is produced and distributed at different levels within the supply chain can be significant and lead to inefficiencies (MacDonald, et al., 2013; Waters, 2010). There are numerous theories which help explain and analyze these concepts such as the bullwhip effect or the beer game (MacDonald, et al., 2013; Waters, 2010).

The Beer Game. The beer game was originally invented by Jay Forrester in the 1960s (The Beer Game Portal, n.d.) and is an activity that is often used in helping define supply and demand as well as the processes and inefficiencies that often are found within the supply chain (MacDonald et al., 2013; Meyer & Purvanova, 2013). This activity helps in demonstrating what is often referred to as the bullwhip effect (MacDonald et al., 2013; Meyer & Purvanova, 2013). This effect shows how variances within the demand for a product at the organization level or across the supply chain can increase due to ineffective feedback within the supply chain. This increase is also known as "demand"



amplification" and is often caused by human inefficiencies (MacDonald et al., 2013; Meyer & Purvanova, 2013).

The beer game activity traditionally includes participants enacting a multi stage supply chain—typically a retailer, wholesaler, distributor, and factory—where the product being manufactured and distributed is beer (Hugos, 2003; The Beer Game Portal, n.d.). The goal of the game is for each of the four stages of the supply chain to effectively fulfill orders by placing orders with the next upstream stage of the supply chain (MacDonald et al., 2013; Meyer & Purvanova, 2013; The Beer Game Portal, n.d.). To add the complexity typically found in a supply chain, communication between the different levels is limited and there is lag time between the placement of the order and the delivery of the product (Meyer & Purvanova, 2013). This lack of communication and need to anticipate demand often results in "demand amplification" or the bullwhip effect as orders move upstream through the supply chain from the customer back to the manufacturer (MacDonald et al., 2013; Meyer & Purvanova, 2013; The Beer Game Portal, n.d.).

According to MacDonald et al. (2013), the causes of the amplified demand are often classified into two categories, (1) structural and (2) behavioral. Structural issues are normally a result of lack of accurate demand forecasting and lack of inventory transparency (MacDonald et al., 2013). Meyer and Purvanova (2013) state that human behavior impacts demand due to the participants reacting to the demand and lack of communication. Some participants act aggressively and over order product, while others react in a more conservative manner and will place smaller orders based off of their thoughts on incoming demand (MacDonald et al., 2013; Meyer & Purvanova, 2013).



Throughout the game, costs are adjusted based on demand for the product. As larger orders are placed costs might increase due to the need for increased production or current low inventory levels. Conversely, if a large amount of product is now available due to overproduction or excess inventory, costs will decrease in order to move the product (MacDonald et al., 2013; Meyer & Purvanova, 2013; The Beer Game Portal, n.d.).

At the end of the simulation, participants will often find that due to ineffective demand forecasting and ineffective response to demand, they will have paid anywhere from 5 to 10 times more the actual cost for the beer (Meyer & Purvanova, 2013).

The beer game effectively identifies traditional issues in the supply chain where the demand for product can change erratically due to many different variables such as lack of communication or ineffective demand planning (Hugos, 2003; The Beer Game Portal, n.d.). The bullwhip effect and the issues associated with the structural and behavior deficiencies in the supply chain can lead to significant increased costs that are often found in real-world DCs (Chen & Lee, 2011; Hugos; 2003). Effective management is needed to offset the potential negative impact of these concepts in a DC.

Distribution

Similar to the supply chain model found in the beer game simulation, most supply chains consist of three structures: a manufacturer who produces the product, a retailer who sells or provides the product or service to the end user, and a process that lies between the other two structures known as distribution ("Distribution Industry," 2015; Hugos, 2003).



APICS, which is a leading association for operations management, produces an annual dictionary of operational terms (APICS website, n.d.). According to the APICS dictionary, "Distribution" is defined as follows:

The activities associated with the movement of material, usually finished goods or service parts, from the manufacturer to the customer. These activities encompass the functions of transportation, warehousing, inventory control, material handling, order administration, site and location analysis, industrial packaging, data processing, and the communications network necessary for effective management. It includes all activities related to physical distribution, as well as the return of goods to the manufacturer. In many cases, this movement is made through one or more levels of field warehouses ("Definition," 2014, p. 50)

The Economic Times (2015) provides a much more succinct definition of the term "Distribution" to mean the spreading of product throughout a marketplace in order to sell to a large number of people. They further describe the process of distribution by discussing the needed transportation to get the product to different geographies as well as a tracking system to ensure the right product and quantity is distributed. Additionally, the larger the geography the product is distributed to, the better chance there is of getting the product to more consumers, which may provide a competitive advantage ("Economic Times," 2015; Hugos, 2003).

Manufacturers use distribution to get their product to the market or to the consumer. They use tools such as distribution, which includes transportation and storage (Hugos, 2003; "Importance," 2015), to ensure the product is moving through the supply chain accurately and effectively in order to get to the end user. These distributors make



products available when, where, and in the sizes and quantities that customers want. Often referred to as the "customers rights," distribution is responsible for delivering "the right product, to the right customer, at the right time, at the right place, in the right condition, in the right quantity, at the right cost" (CSCMP, Chen, Defee, Gibson, & Hanna, 2014, p. 19).

In order to ensure products or services get to the market in the most effective manner, businesses must select distributors that most understand their business model (Dent, 2011; Hugos, 2003). Manufacturers want to choose a distributor that knows their product and can deliver it effectively (Hugos, 2003).

Distributors perform functions for both the manufacturer and either the end customer or a retailer. Distributors engage in a process known as "breaking bulk" (Hugos, 2003) for the manufacturer. They take large amounts of inventory from either single or multiple manufacturers and distribute it in smaller amount to the customer or retailers (Frazelle, 2001; Hugos, 2003). They often take ownership of the product from the manufacturer and take steps to help find new customers, prepare the product for delivery and display at the retailer, or just deliver the product to the end user.

Distributors can be a key contributor in the bullwhip effect through their ability or inability to effectively forecast demand for a product (Hugos, 2003). Manufacturers significantly depend on distributors to understand their product, the complexities of how it needs to be stored or transported or any other compliance related issues about the product. Additionally, distributors need to be competent enough to deliver the product effectively to ensure the "customers rights" (CSCMP, et al., 2014; Zanjirani, et al., 2014).



Every organization plays a part in a supply chain and each supply chain has its own unique set of challenges (Hugos, 2003). Choosing the right distribution strategy and partner is a critical step for manufacturers to ensure they have an effective supply chain that will get their product to the market while maintaining competitive advantage (Hugos, 2003).

DCs are a key component within an organization's supply chain. They can have a tremendous impact on both cost and speed for the customers they are supporting ("Performance," n.d.). In order to remain competitive, DCs must align with the needs of both the producer and the customer. DCs often have many different product handling requirements based on the needs of the product they are distributing (Hugos, 2003). Products may have different storage requirements such as temperature and humidity requirements. The expected shelf life of a product also influences how and where product is stored in a facility and how product is selected in order to get the freshest product to the customer. The customers demanding the product may also have specific needs such as the need to separate products based on possible interactions or based on different storage areas at the point of delivery (Akkerman, Farahani, & Grunow, 2010; Hugos, 2003). All these demands and requirements add to the need for DCs to be a productive and effective part of the supply chain (Akkerman, et al., 2010; Hugos, 2003; "Performance", n.d.). This is especially critical to the Food Service Industry ("Acheson," 2015; Partridge, 2011).

Food Distribution

Approximately 276 million meals are eaten away from home on a daily basis in the United States (Perkins & Caldwell, 2015). They are had at fast food restaurants,



casual restaurants, hospitals, college campuses, etc. They are had by teens grabbing a quick lunch at their favorite fast food restaurant, by patients at a hospital, with clients at a business dinner, or at many other places (Perkins & Caldwell, 2015). The kitchens and locations that produce those meals and the supply chains that provide product for those kitchens are known as the "food service industry" (Partridge, 2011; Perkins & Caldwell, 2015).

Distributing to the food service industry can be significantly complex and is different than the distribution of other products (Akkerman, et al., 2010). The products or food products being delivered are often highly regulated ("FDA," 2015; Partridge, 2011). Distributors within the food service industry are expected to deliver products that are compliant with the FDA and the ever-changing demands of the customer and the consumers. Recent legislation has added significantly to the compliance needs of food products and has had a significant impact on the ability of DCs to effectively deliver food products ("FAQ's," 2015; "FMSA," 2015). The Food Modernization Safety Act is one of the most significant changes to the Food Service Industry in the last 70 years ("FMSA," 2015). It is a regulation that is focused on the prevention of food contamination ("FAQ's," 2015; "FMSA," 2015). The legislation effects all participants in the food service industry supply chain, but specific to distribution centers, it adds complexity to how products are selected, packed for delivery, transported and delivered to the end customer. It also affects the distribution center's ability to track where the product is within the supply chain ("FAQ's," 2015; "FMSA," 2015).

The complexities inherent to the food service industry such as temperature requirements and shelf life requirements ("FDA," 2015), and the additional complexities



of legislation such as the FMSA ("FAQ's," 2015; "FMSA," 2015), have an impact on the effectiveness and the productivity of the DCs that deliver food products to the customer ("Acheson," 2015). These legislative requirements, product handling requirements, and customer/consumer requirements all indicate that distributors not only need to align with those needs, but must also measure their effectiveness in fulfilling those needs (Skowron-Grabowska, n.d.). Within a DC a common means of measuring effectiveness is through measuring productivity (Johnson & McGuiniss, 2010).

Productivity Measurements

Productivity measurements have significantly increased in their importance over the last 30 years, but they are not a new concept (Bai & Sarkis, 2011; Chou, 2004). More than 200 years ago, Jeremy Bentham, a political reformer and philosopher, stated, "The more strictly we are watched, the better we perform ("Bentham," 2015). The Hawthorne studies from the 1920s supported this idea (Roethlisberger & Dickson, 1939).

The Hawthorne studies were conducted at the Western Electric Company. In these studies, associates' productivity was measured as lighting with in the work area was both raised and lowered. In both instances, productivity increased. The conclusion was that just the act of being watched or measuring productivity increased productivity (Roethlisberger & Dickson, 1939). This phenomenon is today known as the Hawthorne Effect ("Hawthorne," 2008; Porter, 2012).

Within the food service industry, customer demands change constantly due to different dietary needs and trends, seasonal demands, allergies, and the marketing effectiveness of restaurants (Partridge, 2011). Add this to the fact that profit margins in the food industry are very low and distribution operations are a significant portion of the



supply chain costs (Yu & Nagurney, 2012). These considerations lead companies today to expect more and more out of their supply chains in order to quickly support those ever changing needs and contain costs (Akkerman et al., 2010; Partridge, 2011). For DCs this means they are expected to be more efficient and more effective than ever before ("Benchmark," 2006; The Aberdeen Group, 2012). Companies served by the supply chain, and specifically distribution centers, not only want better processes and visibility to inventories, but also expect productivity to keep up with the needs of their business ("Benchmark," 2006; The Aberdeen Group, 2012). Amongst distributors, issues such as competition, rising fuel and energy costs, and increasing costs of materials costs adds to the pressure to perform more efficiently (Fraser, Manrodt, & Vitasek, 2008). To ensure competitive advantage, distributors must ensure they are getting the most from their plant and warehouse assets and ensuring they are achieving the highest levels of productivity. One way to measure the effectiveness of the operations is through KPIs (Hamlet, 2015; Ramaa et al., 2012).

Common KPI's

There are hundreds of KPIs commonly used within a distribution center. These KPIs measure things such as the space utilization of a DC, the time it takes to fill and deliver an order, the time it takes to receive and put away an order, the turnover of the product or how quickly it enters the DC and is then delivered to the customer, and many other measurements. Within a DC, there are four main areas where performance is typically measured: the labor force; equipment and the assets being used; the state of the product; and transportation (Ramaa et al., 2012; Ecklund, 2010; Hamlet, 2015; Skowron-Grabowska, n.d.). All of these areas, if not fully productive and managed in an effective



manner, can add significantly to the operational costs. To reduce or contain costs most KPIs focus on the physical aspects of the work environment. This focus often leads to a physical change in the environment such as the purchase of new equipment or a change in the manner in which product is stored in a DC, which would allow for faster more effective ways to select or pick a product from its storage location (Bernhardsson & Shafi, 2013). What is often lacking in the KPIs within a DC and the efforts towards increased productivity is a focus on human factors (Bernhardsson & Shafi, 2013; Lee & Ok, 2014).

One of the highest costs within a DC is the cost of labor. The physical activities of an associate within a DC can represent up to 65% of total operational costs (Barry, 2009; Bernhardsson & Shafi, 2013). There are some fundamental actions that can be taken to ensure productivity and assist in containing costs labor costs within a DC. Hiring appropriately skilled labor, ensuring the size of the workforce matches the amount of work to be done, providing some type of incentive pay for higher productivity, and providing ongoing training are just a few ways in which the performance or productivity of associates can be managed (Barry, 2009; Bloom & Reenan, 2010). When looking to increase productivity many organizations focus on investing in assets and technology (Bloom & Reenan, 2010; Syverson, 2011; "Worker Productivity," 2010). There are many factors that influence and help create a positive climate within an organization, and one of the most critical influences is that of the leader (Cherniss & Goleman, 2001; Goleman, et al., 2002).

In addition to the impact that comes from new and more effective assets and technology, researchers have also long argued that leaders themselves can have a



significant impact on productivity through their interactions with the workforce (Goleman, et al., 2002; Syverson, 2011). This impact is often related to the amount and quality of the interaction the leaders have with the workforce and the type of work environment that is created as a result of that interaction (Annunzio, 2004; Bloom & Reenan, 2010; Syverson, 2011). The more positive the interaction is with the leader, the larger the impact that leader can have on the work climate (Schuh & Zhang, 2012). Research shows that the human aspects of leadership displayed by leaders, which includes engaging employees and building a climate associates can thrive in, are critical to building an environment that can lead to higher performance and productivity (Cherniss & Goleman, 2001; Walumbwa, Avolio, Gardner, Wernsing, & Petersen, 2008). Researchers further argue that approximately 50% to 70% of associates believe that the organizational climate is primarily created by the leaders of the organization (Goleman, et al., 2002).

The relationship associates have with the leaders and the climate created as a result of that relationship and its interactions can lead to more highly engaged employees (Fuller, 1998). This engagement leads to positive business results, such as better financial results, higher return on assets, lower employee turnover, and higher productivity from the associates (Goleman, et al., 2002; Lee & Ok, 2014; Wong & Laschinger, 2012).

Avolio et al. (2004), suggest that the positive leadership behaviors shown by leaders help create higher quality relationships with associates, which can lead to active engagement of associates in workplace activities, which again, can lead to greater job satisfaction and higher productivity. Cherniss and Goleman (2001) argue that effective



leadership may be one of the most important factors in creating a positive environment and that resulting climate may account for up to 30% of organizational performance.

There are numerous theories and approaches that exemplify how effective leadership manifests itself within the workplace (Northouse, 2001).

Approaches to Leadership

In trying to define leadership, Stogdill (1990) states, "There are almost as many different definitions of leadership as there are persons who have tried to define the concept" (p.11). Leadership has been defined as a process, as a behavior, as a set of traits individuals are born with, or as traits to be learned (Northouse, 2001; Yukl, Gordon, & Taber, 2002). Although there are numerous definitions and theories about leadership, the common element amongst the research is that it has the ability to influence others to a common goal (Northouse, 2001; Bryman, 2013).

How leaders can most effectively influence others can be studied by examining various leadership approaches and theories. The following selected approaches describe the processes and behaviors involved between leaders and followers, as well as the relationships among these individuals that can lead to organizational effectiveness and goal attainment (George & Sims, 2007; Northouse, 2001).

Trait Approach

One of the first in-depth studies of leadership theory was a study of the leadership traits inherent to effective leaders. Known as "trait theory" or as the "Great Man theory" (Kirkpatrick & Locke, 1991; Northouse, 2001) this theory initially argued that effective leadership traits are inherent to effective leaders, especially those leaders from the "upper class" (Kirkpatrick & Locke, 1991). These inherited traits included, but were not limited



to, traits such as achievement, motivation, ambition, energy, tenacity, and initiative (these were also collectively known as "drive"), honesty, integrity, self-confidence, intelligence, and knowledge of the business (Kirkpatrick & Locke, 1991, p. 1).

In the 19th and 20th centuries, theorists argued that these traits were inherent to good leaders and that they may, in fact, have been born with these traits causing them to be part of the leader's genetic makeup (Zaccaro, 2007). Although this was a popular theory, it was eventually challenged and theorists began to argue that leaders that may be effective in one area may not be effective in others (Northouse, 2001; Stogdill, 1948). Additionally, they argued that there is not one set of universal traits that define an effective leader. Stogdill (1948) argued that the effectiveness of a leader was less about the quantity of traits a leader possessed, but rather a product of the relationship between people in a social situation. The traits of a leader continued to be important but researchers of the "trait theory" began to shift their focus to how those traits were applied in certain situations (Northouse, 2001, Zaccaro, 2007).

Although a universal list of traits that will allow a leader to be effective in all situations has be deemphasized in recent years by experts, leadership experts still argue that organizations will be more effective if they look for leaders that have, or train leaders to have, a specific leadership profile or traits relevant to the organization (Northouse, 2001). The effectiveness of a specific leadership profile or a set of leadership traits is contingent upon the leader's ability to recognize the traits they possess and how they can be best applied in specific situations in order to achieve effectiveness within the organization (Stogdill, 1948; Northouse, 2001; Cherniss & Goleman, 2001).



Contingency Theory

Similar to current thoughts on the trait theory of leadership, leadership experts argue that the Contingency Theory of leadership also begins with an understanding that no one style or approach to leadership is effective in all situations (Fiedler, 1964; Rice & Kastenbaum, 1983). Also referred to as the "Leader–Match" theory (Northouse, 2001), proponents of this theory argue that to achieve effectiveness the leader's style must match the context of the situation in which they must lead.

The Contingency Theory first gained popularity after Fred Fiedler introduced the theory in 1964 (Northouse, 2001). Fiedler developed his theory after studying numerous leadership styles amongst leaders working in many different contexts and whether or not the leaders were effective (Fiedler, 1964; Northouse, 2001). He based his findings on the leadership style of the leader and three primary variables found within situations the leader was tasked with addressing. The three variables are (a) positional power, (b) the nature of the subordinate's task, and (c) the nature of the interpersonal relationship of the leader and the follower (Fiedler, 1964; Justis, 1975; Northouse, 2001;).

The first variable, positional power, can be described as the amount of authority a leader has over his subordinates to either reward or punish them. The more influence the leader has over rewarding or punishing their subordinates the stronger the positional power (French & Raven, 1959; Northouse, 2001).

The second variable, described as the nature of the subordinate's task, refers to the level to which the task is spelled out or defined. The more the task is spelled out, the more the leader has control and the task structure is considered high. The less a task is



spelled out or defined, the less the leader has control over its completion and the task structure is considered low (Northouse, 2001; Rice & Kastenbaum, 1983).

The final variable, the nature of the interpersonal relationship of the leader and the follower, can be described as the group atmosphere and the degree to which the subordinates trust or have confidence in the leader (Fieldler, 1964). If the atmosphere is positive and the subordinates like, trust, and get along with their leader then the relationship is defined as good. If within the relationship, a low level of trust or friction exists then the relationship is defined as poor (Northouse, 2001).

The contingency model uses a scale to assess a leader's style. Known as the "Least Preferred Coworker" scale, the assessment identifies if the leader is more task oriented or relationship oriented (Northouse, 2001). In addition to assessing the leaders style, the task at hand is compared to a model that identifies the level of each of the three primary variables found within the situations the leader will have the subordinates complete (Rice & Kastenbaum, 1983). Based on the variables, the model labels the situations as "most favorable," "least favorable," or "moderately favorable" (Northouse, 2001, p. 77). Once a leader's styles is identified and the situation's favorableness has been identified, a decision can be made based off of the recommendations outlined in the contingency model as to the "leader match" to the situation (Fiedler, 1964; Northouse, 2001; Rice & Kastenbaum, 1983).

Authentic Leadership

Authenticity is often defined as being true to one's self (Harter, 2002). Kernis (2003) has described authenticity as, "the unobstructed operation of one's true, or core, self in one's daily enterprise" (p.16). Avolio, Walumbwa, and Weber (2009), argue



authentic leadership is more complex than just being true to one's self, and define authentic leadership as "a process that draws from both positive psychological capacities and a highly developed organizational context, which results in both greater self-awareness and self-regulated positive behaviors on the part of leaders and associates, fostering positive self-development" (p. 424).

An authentic leader is known to be highly self-aware of their belief systems and values and they use that awareness to regulate their behaviors. They find that what motivates them is often their own life story from which they derive behaviors such as hope, optimism, resilience, and self-efficacy (George, 2007; Ilies, Morgeson, & Nahrgang, 2005; Wong & Laschinger, 2012). These behaviors assist them in developing greater self-awareness, and developing and displaying greater self-regulated behaviors (Wong & Laschinger, 2012). In addition to greater self-awareness and self-regulation, authentic leaders are known to focus on building upon the strengths of their subordinates. They do this by creating a positive and engaging organizational environment and showing a genuine desire to understand themselves as leaders and to serve others effectively (Ilies, et al., 2005; Walumbwa, et al., 2008).

Authentic leadership is considered by many experts to be a root element of the effective leadership needed to build healthier work environments. This is due to the attention amongst authentic leaders to focus on the development of empowering leader-follower relationships (Ilies, et al., 2005; Walumbwa, et al., 2008). Authentic leaders continually look for ways to improve themselves as leaders and look to improve their ability to serve others. They continually seek ways to connect with others and to build trust with those they lead. This drive to continually improve and serve others effectively



allows authentic leaders to motivate those they lead to high levels of performance (George, 2007; Walumbwa, et al., 2008).

Transformational Leadership

The term "transformational leadership" was first introduced by Downton (1973) in his book, *Rebel Leadership: Commitment and Charisma in the Revolutionary Process*. Although this is often cited as the origin of transformational leadership, the theory did not begin to gain credibility until Burns (1978) released his study on the theory and stated, "transformational leadership occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of morality" (p. 20). Similar to authentic leadership, transformational leadership also has a focus on the relationship between the leader and the follower (Burns, 1978; Northouse, 2001). Northouse (2001) defined transformational leadership as follows, "Transformational leadership involves assessing followers' motives, satisfying their needs, and treating them as full human beings" (p. 131). This approach to leadership is composed of four key characteristics: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Avolio & Bass, 2004; Northouse, 2001).

Idealized influence. Transformational leaders act in such a way that they are seen as strong role models for their followers (Northouse, 2001). These leaders have a strong moral compass and are seen as highly ethical. They provide a vision for their followers and their followers respect, admire, and often emulate them (Northouse, 2001; Stone, Russell, & Patterson, 2003).

Inspirational motivation. Transformational leaders build relationships with followers through interactive communication, using symbols and emotional appeal which



helps in building a bond between the leader and follower (Northouse, 2001). This bond building leads to a shifting of values by both parties towards a common ground. The leader communicates high expectations to followers and inspires them to commit to an attractive shared vision (Northouse, 2001; Stone, et al., 2003).

Intellectual stimulation. Transformational leaders inspire their followers to be innovative and creative by challenging their beliefs as well as having them challenge the beliefs of their leader (Northouse, 2001; Stone, et al., 2003). These leaders support their followers as they try new approaches to problems and as they develop innovative ways of dealing with organizational issues (Northouse, 2001; Stone, et al., 2003). In essence, according to Avolio, Bass, and Jung (1999), intellectual stimulations gets "followers to question the tried and true ways of solving problems, and encourages them to question the methods they use to improve upon them" (p. 444).

Individualized consideration. Leaders who display this behavior listen to their followers and provide a supportive climate that helps the leader understand the needs of each of their followers (Avolio et al., 1999; Northouse, 2001). Leaders showing individualized consideration act as coaches and advisors and help their followers fully actualize their individual potential (Northouse, 2001).

The Need for Effective Leaders

According to Northouse (2001), organizations in the 21st century have a genuine demand for effective leaders. Regardless of the theory of leadership effectiveness one prescribes to, or the approach or style a leader displays, the bottom line for leaders is to optimize performance and achieve superior results by ensuring there is an engaging, productive climate being built (George, 2007). In order to ensure the most productive



climate is being built, organizations must ensure the effectiveness of the leaders building that climate (Pearce, Maciariello, & Yamawaki, 2010). There are many qualities, which are examined when hiring or developing effective leaders. In today's increasingly technological workplace where general cognitive ability and leadership skills are necessary to compete, the level of intelligence one possesses is critical (Snyderman & Rothman, 1988). General intelligence or IQ is one quality that has long been argued to be positively related to leadership effectiveness (Rockstuhl, Seiler, Ang, Van Dyne, & Annen, 2011). Over nearly a century of research has led to the examination of other types of intelligence and to the introduction of EI as a critical complement to traditional cognitive intelligence. Researchers today argue that EI is becoming more critical in identifying effective leadership and that within an organizational context IQ is just a baseline required to understand the technological environment (McKee, Boyatzis, & Johnston, 2008).

Before understanding how EI can be used effectively in a work environment and how it can drive productivity, understanding intelligence and its value must be reviewed.

Intelligence Defined

Researchers have been trying to define and have been discussing models of intelligence for many years. Historically, intelligence is defined as a set of relationships among test scores, the capacity an individual has for appropriate judgment, and the ability to conduct themselves with purpose, rationale and effectiveness (Plucker & Esping, 2015; Richardson, 2000).

One of the most generally accepted models of intelligence comes from British psychologist Charles Spearman (1904). His belief was that individuals have a certain



level of intellectual ability, which the person can demonstrate in the areas of endeavor, and that it will be displayed differently under different circumstances (Spearman, 1904; Sternberg & Kaufman, 2011; Richardson, 2000). Spearman studied the cognitive functions of hearing, sight and touch and the ability to discriminate amongst varying levels of each function. The research was conducted amongst 93 school age children ranging from elementary school through high school. He also studied the same factors amongst 26 adults (Spearman, 1904). In simple terms, Spearman's model implied that performance on any intellectual task is impacted by two factors; one factor is specific to the task at hand and the other is a general factor common to all intellectual tasks. Spearman argued that the one variable that is common to all intellectual tasks, referred to as "g," can be measured as high, medium or low amongst individuals. Additionally, Spearman believed that a measurement of "g" in one area, such as verbal comprehension, would therefore be an adequate indication of ability in all intellectual areas (Mayer, 2014), and that the second factor, "s" played a smaller role and was only relevant to the specific task at hand (Spearman, 1904). Spearman's model of intelligence has been hailed as one of the biggest discoveries in psychology (Richardson, 2000; Snyderman & Rothman, 1988).

Although Spearman's theory of intelligence was widely accepted, there were still many theorists during the early part of the 19th century that felt a single theory of general intelligence was limiting (Mayer, 2014). Where Spearman argued that one's level of intelligence was similar across many areas, others argued that individuals could have differing levels of intelligence and abilities in different cognitive areas (Mayer, 2014; Snyderman & Rothman, 1988).



Multiple Intelligences

In 1920, E.L Thorndike, an intelligence expert, argued that intelligence was not one thing that is indicated by one level of measurement; he argued that there must be multiple intelligences (Mayer, 2014; Thorndike, 1920). He suggested that three types of intelligence exist: social, mechanical, and abstract (Nazir & Ganai, 2015). In regards to social intelligence, he defined it as "the ability to understand and manage men and women, boys and girls—to act wisely in human relations" (Thorndike, 1920).

This concept of "social intelligence" was not widely accepted and even dismissed by some as useless (Goleman, 1995). Many experts have defined social intelligence as the ability to read, understand, and adapt in different social environments. Leaders that have shown levels of social intelligence display the ability to be socially aware and have flexibility in their behaviors in order to react appropriately in different social environments (Frost & Hoffman, 2006; Stogdill, 1948).

Multiple Abilities

In contrast to Spearman's theory of a general variable that impacts one's ability across all intellectual areas, "g," and one lesser variable specific to the individual task, "s," Thurstone (1938) argued that the lesser variable played a larger role than implied in the Spearman model and that intelligence is multifaceted. Thurstone conducted approximately 56 separate tests amongst 240 volunteers in his study to understand if intelligence was primarily found in one variable or as part of multiple variables or abilities. As a result of his study he argued that when measuring intelligence there are a number of variables to be considered. Thurstone labeled the following variables as "primary mental abilities" to be considered when measuring intelligence:



- Verbal comprehension
- Spatial orientation
- Inductive reasoning
- Number facility
- Word fluency
- Associative memory
- Perceptual speed

Thorndike and Thurstone's work to expand on the definition of intelligence spurned others to further attempt to define and measure intelligence and social intelligence. Many attempts to measure social intelligence, after being introduced failed and as measurements of traditional IQ continued to grow, the interest in multiple intelligences and social intelligences continued to fade (Cherniss & Goleman, 2001).

In his book, *Frames of Mind*, Gardner (1983) helped bring the discussion of multiple intelligences back into being. He identified 7 intelligences and provided criteria for what defines an intelligence. Gardner (1983) identified the following intelligences:

- Linguistic
- Musical
- Logical-Mathematical
- Spatial
- Bodily-Kinesthetic
- Interpersonal
- Intrapersonal



Additionally, he provided criteria that would identify intelligence (Gardner, 1983, p. 63-65). Some of that criterion is as follows:

- Potential isolation by brain damage.
- The existence of idiot savants, prodigies, and other exceptional individuals.
- An identifiable core operation or set of operations.
- An Evolutionary history and evolutionary plausibility

One such group of intelligences Gardner identified was "personal intelligences". Personal Intelligences were described as "little more than the capacity to distinguish a feeling of pleasure from one of pain and, on the basis of such discrimination, to become more involved in or withdraw from a situation" (Gardner, 1983, p 239).

Since the introduction of multiple intelligences and abilities—specifically personal and social intelligences—experts have expanded upon their ideas and have introduced the concept of EI. Additionally, experts have asserted that EI meets the criteria identified by Gardner as required to be labeled an intelligence (Cherniss & Goleman, 2001; Goleman, 1995).

Emotional Intelligence Introduction

At the core of EI research is how an individual reacts to emotions as they enter the brain. Experts argue that when we respond to emotions it involves circuitry that runs between the brains prefrontal lobes and the limbic system. Signals enter our body in an area known as the basal ganglia and must pass through the limbic system before reaching our prefrontal lobes (Bradberry & Greaves, 2009; Goleman, et al., 2002). The basal ganglia is a primitive part of our brain that turns decision making variables into behavior. As signals leave the basal ganglia they pass through the limbic system, which governs



our feelings, impulses, and drives before they reach the prefrontal cortex. The prefrontal cortex controls our rational thinking and signals our basal ganglia how to behave (Bradberry & Greaves, 2009; Goleman et al., 2002; Haynes, 2014). The ability that an individual has in allowing these signals to enter the prefrontal cortex, where rational decision making takes place, without being impacted by the limbic system in a manner that may cause irrational or ineffective decisions to be made is the core of EI (Bradberry & Greaves, 2009; Goleman, 1995).

The idea of EI has evolved over many years and has been defined by many researchers. In 1990, Mayer and Salovey introduced their concepts on EI and defined it as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions (Mayer & Salovey, 1990, p. 5). Cherniss and Goleman (2001) provided the following definition, "Emotional Intelligence, at the most general level, refers to the abilities to recognize and regulate emotions in ourselves and in others, this most parsimonious definition suggests four major EI Domains: self-awareness, self-management, social awareness and relationship management" (p. 14). Bradberry and Greaves (2009) further defined EI as "...your ability to recognize and understand emotions in yourself and others, and your ability to use this awareness to manage your behavior and relationships" (p.17).

In conducting research on EI, the amount of information can almost be overwhelming. Searching the term "Emotional Intelligence" with a search engine such as Google produced more than 7 million documents. When refined to peer reviewed articles, dissertations and books, the amount drops off significantly, but still produces



more than 170,000 titles on EI. Much of the available literature found discussed emotions in the work place from a negative perspective. Terms like negligence, avoidance, irrational, and negation were themes often used (Khalili, 2012). Since Goleman (1995) published his book, *Emotional Intelligence*, there has been a great amount of literature published that discusses the positive impact of EI.

Emotional intelligence in the workplace. According to Annunzio (2004), in today's demanding work place, constant change and increasing customer demands cause many business leaders to manage in a manner which equates to doing the same things just "harder and faster" as pressure and demands mount. This does not necessarily drive effectiveness in an organization nor increase productivity amongst associates. Lubit (2004) states, "the better you understand how other people view the world and what motivates them, the better you will be able to influence them to behave in ways that are helpful" (p. 10). This is just one aspect of the effectiveness and need for EI in the workplace. The Langley Group (2012) argues that there is more and more evidence EI—more than other traditional hard skills and measurements such as, knowledge, technical skills or intelligence—will more accurately determine individual effectiveness and business outcomes.

As part of the ongoing debate, as to which drives business effectiveness more, EI or IQ, Goleman (2014), states that both are important. He states that IQ can be used as a benchmark to sort individuals into appropriate careers and positions but once in those positions it is EI that drives success (Goleman, 2014; Goleman, et al., 2002;). EI experts argue that this foundational competency is what separates high performing individuals from others and helps propels them and their organizations to higher levels of success.



Within a distribution environment, the interactions between a supervisor and warehouse associate are numerous. A supervisor's way of seeing and interpreting things within a work environment carries special weight for those associates that work for the supervisor. Most often associates see the leader's emotional reactions in varying situations as the most valid response, and model their own reactions after it (Goleman, et al., 2002). If supervisors are expected to drive productivity amongst their associates and drive organizational effectiveness in a very demanding and competitive environment, then the supervisor's level of EI is a critical variable in determining that effectiveness.

Criticisms of emotional intelligence. Although there has been significant research conducted over the last 15 years to evaluate the effectiveness of EI as a predictor of success in the workplace and as a measurable form of intelligence, it is not without its criticisms. Several experts have taken issue with the lack of peer reviews and the many constructs surrounding EI claiming to be empirically supported.

Critics argue that much of the research and claims about the effectiveness of EI has come through research published in books as opposed to peer reviewed journals (Sadri, 2012). This, they argue, has allowed the concept to grow in popularity without significant scrutiny.

Waterhouse (2006) begins her critique by arguing that Gardner's theory of Multiple Intelligences cannot be empirically supported because there has not been significant validation of the theory. She further argues that the theory of EI also cannot be empirically validated due to too many conflicting constructs and that the multiple constructs implies that the theory is poorly understood (Waterhouse, 2006). Other experts argue that the construct of EI itself has become fractured due to scientists trying



to develop a psychological construct while marketers attempt to develop a framework that can be used commercially (Murphy, 2006).

Petrides (2010) provides a more direct criticism by arguing that both EI and the potential of an "archetypal" emotionally intelligent leader, that has been identified as such through testing, are myths and that emotions are known to distort decision making and reasoning. Petrides and others also argues that current definitions of EI describe little more than a set of personality traits rather than unique construct linking emotions and cognition (Petrides, 2010; Jordan, Ashton-James, & Ashkanasy, 2005).

EI experts suggest that the multiple constructs show that there is vitality in the theory and amongst researchers (Cherniss, Extein, Goleman, & Weissberg, 2006). They further argue that IQ is limited in its ability to predict success in work or in life and that IQ may only account for as little as four to twenty-five percent of success (Cherniss, 2000; Goleman, 1995). A recent labor market study compared cognitive abilities to non-cognitive abilities and found that non-cognitive abilities, such as emotional stability and social skill, when combined with each other, were a better predictor of wages, employment status, and annual wages (Hogan, Chamorro-Premuzic, & Kaiser, 2013).

In regards to effectiveness in the work environment, EI experts argue that cognitive ability or IQ is required to have the competence to understand the technical requirements of a job, but it is the effective use of EI by leaders that cause their workers to follow them to achieve organizational objectives (Ingram & Cangemi, 2012; Rock, 2009). Additionally, numerous studies show that managers with leadership styles that display positive EI see better financial results than those who did not (Goleman, et al., 2002).



Despite there still being critics of EI, there have been numerous studies that have generated empirical data that show the measureable value of EI within the workplace (Goleman, et al., 2002).

Cultural Intelligence

One of the four domains of EI that this study will focus on is Social Awareness (Goleman, 1995). Social awareness assists the leader in understanding what others are feeling and the ability to use that understanding to effectively lead those associates. Cultural intelligence (CQ) according to Ang and Van Dyne (2008) is defined as "an individual capability to function effectively in situations characterized by cultural diversity" (p. xv). CQ plays a critical part in the role of a leader as workplaces become more and more diverse. Globalization is causing significant diversity in the workforce, and leaders are working more and more with associates who may have different cultural or ethnic backgrounds (Ang, Dyne, & Koh, 2006). Although there may be a group of singular goals, objectives or metrics amongst a workforce that drive associates in the same direction, cultural differences can have a significant impact on how effectively supervisors can drive those objectives. The supervisor's ability within the domain of social awareness should play a critical role in working with a diverse workgroup of associates (Goleman, 1995; Lubit, 2004).

History of Emotional Intelligence

Most of the formal discussions and research in regards to EI have taken place of the last 35 years, however the roots of EI can be found in numerous writings across the last century ("Introduction," 2005). The history of EI begins as a discussion on the



limitations of simple intelligence and evolves into a concept today that is easily validated through numerous constructs and measurement tools (Cherniss, 2000; Goleman, 1995).

Thorndike's definition in 1920 of the concept he called social intelligence paved the way for experts to begin looking at other intelligences to include EI (Cherniss & Goleman, 2001; Thorndike, 1920).

Maslow. Abraham Maslow (1943) added to the need to further research EI when he introduced his thoughts on human motivation through a hierarchy of needs (Bar-On, 2010; Maslow, 1943). This needs hierarchy, often displayed in the form of a pyramid (see figure 1) identifies needs that he believed motivated the individual. As one need is fulfilled, an individual will then look to fulfill the next level of need in the pyramid (Maslow, 1943). Lower level needs within the pyramid are referred to the physiological and security needs and they include the physical needs and safety needs of an individual. It is the higher level needs within the pyramid that connect to EI (Maslow, 1943; "Needs," 2015). These higher level needs include things such as relationships, friendship, approval, status, and self-confidence (Maslow, 1943). These needs are not fulfilled through our cognitive ability, but rather through EI.



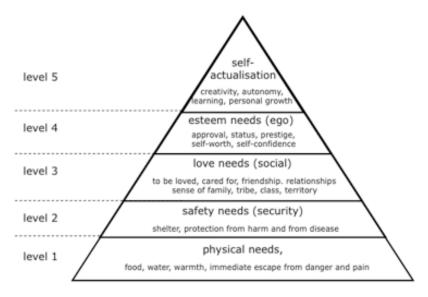


Figure 1. Maslow's Needs Hierarchy

Gardner. In 1983, Gardner introduced the idea of multiple intelligences in his book, *Frames of Mind: The Theory of Multiple Intelligences*. Similar to the early work by Thorndike on social intelligence, Gardner introduced interpersonal and intrapersonal intelligences, along with five other intelligences. Interpersonal and intrapersonal intelligences described the capacity to not only understand your own feelings and motivations but to also understand them in others (Gardner, 1983). These interpersonal and intrapersonal intelligences have become foundational to other models of EI (Mayer & Salovey, 1990).

Gardner (1983) also introduced a set of criteria to be used when defining his seven identified intelligences. This paved the way for the study of EI to be viewed through a more credible filter and Goleman (1995) will later argue that EI does, in fact, meet the criteria for an intelligence as described by Gardner.

Bar-On. In an attempt to provide some type of measurement of EI, Reuven Bar-On created a set of competencies influenced by the works of intelligence experts ranging from Darwin and Thorndike to Gardner (Bar-On, 2015). Bar-On (1985) is recognized as

the original creator of the term "emotional quotient," also referred to as EQ and later EI. The model he created has five domains with in it: intrapersonal skills, interpersonal skills, adaptability, stress management and general mood ("EQ-iTM," 2013). He argued that the skills associated with the social and EI's influence not only an individual's ability to survive, but more importantly to thrive and succeed when dealing with environmental demands (Bar-On, 2015; Bar-On, 2010). Bar-On (2015)defines emotional-social intelligence as "... an array of interrelated emotional and social competencies, skills and behaviors that determine how well we understand and express ourselves, understand others and relate with them, and cope with daily demands, challenges and pressures" (pages). He further states this array of competencies has a significant impact on intelligent (Bar-On, 2010). In order to validate his model and provide some type of measurement, Bar-On created a psychometric measure identified as the Bar-On Emotional Quotient InventoryTM or EQ-iTM (Bar-On, 2015; "EQ-iTM," 2015).

The EQ-i[™]. Bar-On's measurement tool, the EQ-i[™] was first published in 1996. Through a series of short questions, the self-report tool measures EI on 15 different scales (see table 1):

Table 1

The Bar-On model of emotional-social intelligence (ESI)

EQ-I SCALES	The EI competencies and skills assessed by each scale
Intrapersonal	Self-awareness and self-expression:
Self-regard	To accurately perceive, understand and
Emotional self-awareness	accept oneself
Assertiveness	To be aware of and understand one's
Independence	emotions
Self-actualization	To effectively and constructively express one's emotions and oneself



To be self-reliant and free of emotional

dependency on others

To strive to achieve personal goals and

actualize one's potential

Social awareness and interpersonal Interpersonal

Empathy relationship:

Social responsibility To be aware of and understand how others Interpersonal

feel

To identify with one's social group and

cooperate with others

To establish mutually satisfying

relationships and relate well with others

Emotional management and regulation: Stress management To effectively and constructively manage Stress tolerance

Impulse control emotions

To effectively and constructively control

emotions

Change management: Adaptability

Reality-testing To objectively validate one's feelings and

Flexibility thinking with external reality

Problem-solving To adopt and adjust one's feelings and

thinking to new situations

To effectively solve problems of a personal

and interpersonal nature

General mood **Self-motivation:**

Optimism To be positive and look at the brighter side

of life

To feel content with oneself, others and life

Note. From The role of emotional intelligence in the workplace: A literature review by A Khalili 2006, International Journal of Management

The Bar-On model is designed to measure both emotional and social competence in the above identified areas. Low scores on the EQ-iTM could indicate emotional and social behavioral problems where an individual receiving and average score can be expected to be effective in emotional and social functions. High scores indicate an individual is more effective in meeting daily demands and challenges (Bar-On, 2012, p. 32; Bar-On, 2015; Kamboj, 2014).

Mayer and Salovey. Mayer and Salovey are considered some of the first to have written about EI in peer reviewed journals and published their first paper, Emotional



Happiness

Intelligence, in 1990. They provided further research on EI as they attempted to develop a means in which to measure an individual's ability level within different areas of emotions (Mayer & Salovey, 1990). Specifically, they attempted to identify one's ability in appraising and expressing emotions, regulating one's own and others emotions, and in using emotions effectively (Mayer & Salovey, 1990). They defined EI as "...the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Mayer & Salovey, 1990, p. 6; Mayer & Salovey, 1993, p. 1).

Mayer and Salovey state that their model of EI overlaps with Gardner's concept of personal intelligences in that EI allows an individual to detect and identify complex and different feelings (Mayer & Salovey, 1993). They further argue that individuals who can identify complex feelings and label them will recover more quickly from emotional distress faster than those who cannot identify their feelings as well (Cherniss, 2000).

In 2003, they proposed that EI consists of two main areas: experimental intelligence and strategic intelligence which are further broken down in to four domains or branches as shown in table two, (1) perceiving emotion, (2) facilitating thought with emotion, (3) understanding emotion, and (4) managing emotion (Kamboj, 2014; Rubin, Munz, & Bommer, 2005).

Table 2

The four-branch model of emotional intelligence.

Emotional Intelligence		
Branch Name	Brief description of skills involved	
Perception of emotion	The ability to perceive emotions in oneself	
Branch 1	and others, as well as in objects, art,	
	stories, music and other stimuli	



Use of emotion to facilitate thinking	The ability to generate, use, and feel
Branch 2	emotion as necessary to communicate
	feelings, or employ them in other cognitive
	processes
Understanding of emotion	The ability to understand emotional
Branch 3	information, how emotions combine and
	progress through relationship transitions
	and to appreciate such emotional meanings
Management of emotion	The ability to be open to feelings, to
Branch 4	modulate them in oneself and others so as
	to promote personal understanding and
	growth

Note. From "Measuring emotional intelligence with the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)" by M. Brackett and P. Salovey 2006, Psicothema, p. 35.

Since the publication of *Emotional Intelligence* in 1990, they have worked with numerous researchers (Zeidner, Matthews, & Roberts, 2004). Working with David Caruso they developed a test known as the Mayer Salovey Caruso Emotional Intelligence Test or the MSCEIT. The MSCEIT—which is considered one of the three leading assessments tools of EI along with the Bar-On model and later the Goleman model—measures an individual's ability within each of the four mentioned branches (Bar-On, 2015; "MSCEIT," 2014).

MSCEIT. The MSCEIT measures the four branches of EI identified in the Mayer Salovey model described in Table 3 (Bar-On, 2015; Mayer & Salovey, 2012; "MSCEIT," 2014). The test is a performance-based test where individuals are required to solve problems that require the use of emotion ("MSCEIT," 2014). The test itself asks 141 questions divided amongst the branches and provides seven scores. This includes one score per branch, two scores for the areas called Experiential EI and Strategic EI as well as one overall score (Brackett & Salovey, 2006; Walter, Cole, & Humphrey, 2012).



Goleman. Due to his significant work in bringing EI into light, Daniel Goleman is often mistakenly identified as the creator and founder of the term EI ("History," 2015). In 1995, while influenced by the work of Mayer and Salovey (1990), Goleman's book, *Emotional Intelligence, Why It Can Matter More Than IQ*, brought emotional intelligence out of the academic world, where most of the research resided, and introduced it to the general public as a learned competence (Bradberry & Su, 2006; Cherniss & Goleman, 2001). He generally described EI as the ability to manage one's own feelings and recognize the feelings of others in a way that promotes emotional and intellectual growth (Goleman, 1995).

Since the publication of his first book in 1995, Goleman, has continued to author numerous books and articles on the subject and is considered a leading theorist on the subject. Goleman's work focused on the neuroscience of EI and, different from other EI experts, Goleman shifted the focus to how influential EI can be by adding to the effectiveness of leadership in the workplace (Cherniss & Goleman, 2001; Goleman, 1995; Goleman et al., 2002).

Goleman's initial model focused on five elements: "1) knowing one's emotions; 2) managing emotions; 3) motivating oneself; 4) recognizing emotions in others, and 5) handling relationships" (Berrocal & Extremera, 2006, p. 9). In 1998, Goleman defined EI as "...the abilities to recognize and regulate emotions in ourselves and in others." He further suggested there are four major domains of EI (Table 3): self-awareness, self-management, social awareness, and relationship management and provided a comprehensive definition of each of them (Goleman et al., 2002). In summary, self-awareness refers to the ability to be attuned to your inner signals and how they impact



your work performance. Self-management refers to the ability to manage and control feelings and impulses. Social awareness refers to the ability to use empathy to sense the emotions of an individual or a group. Relationship management refers to the ability to finding the right mix of empathy and appeal in order to garner buy-in and support from an individual (Goleman, 2011).

Table 3
Goleman's model of EI

Personal Competence	Social Competence
Self-Awareness	Social Awareness
-Emotional self-awareness	-Empathy
-Accurate self-assessment	-Organizational awareness
-Self-confidence	-Service
Self-Management	Relationship Management
-Emotional self-control	-Inspirational leadership
-Transparency	-Influence
-Adaptability	-Developing others
-Achievement	-Change catalyst
-Initiative	-Conflict management
-Optimism	-Building bonds
	-Teamwork & collaboration

Note. Adapted from: The role of emotional intelligence in the workplace: A literature review by A Khalili 2006, International Journal of Management

Emotional and Social Competence Inventory. Similar to Bar-On, Mayer, and Salovey, Goleman also created a measurement tool to assess levels of EI. In collaboration with Richard Boyatzis he helped develop the Emotional and Social Competence Inventory, or ESCI (Boyatzis, 2009; Cherniss & Goleman, 2001). Their assessment, considered one of the most validated and one of the most widely used assessments, was designed to help identify outstanding leaders through an assessment of their emotional and social competencies ("Assessments," 2015). Unlike the EQ-iTM and the MSCEIT, this assessment is not designed as a self-reporting tool but instead is a 360



degree survey tool. It asks the individual to select numerous participants which are each sent a survey to complete on the individual. Accredited experts, trained to administer the assessment then analyze the qualitative input and provide a feedback report. Goleman's focus on EI's benefit in the workplace is evident in the application of the ESCI. According to the Hay group (2015) organizations use to assessment to identify the following:

- Measure EI of leaders and professionals
- Raise awareness through powerful feedback
- Focus coaching and development on crucial capabilities
- Bring out the best in individuals and teams ("ESCI," 2015)
 Bradberry and Greaves. Similar to Goleman, Travis Bradberry and Jean

Greaves (2009) continued to focus on the impact of EI in the workplace in their book, *Emotional Intelligence 2.0.* They define EI as "... your ability to recognize and understand emotions in yourself and others, and your ability to use this awareness to manage your behavior and relationships" (Bradberry & Greaves, 2009, p. 17). In their research they argue that there is no correlation between cognitive IQ and EI .

Additionally, they argued that 58% of performance in the workplace is impacted by EI (Bradberry & Greaves, 2009; Ingram & Cangemi, 2012). In addition to creating an assessment to measure EI, they argue that emotional intelligence can be developed and they identify numerous strategies to assist in the development of EI (Bradberry &

Emotional Intelligence Appraisal®–Me Edition. This assessment is one of three commercially available EI assessments created by Travis Bradberry and Jean Greaves (2009). It's design is based on four domains of EI associated with the Goleman model of EI: self-awareness, self-management, social awareness, and relationship management



Greaves, 2009.

(Cherniss & Goleman, 2001). The self-report assessment is available as part of the author's book, *Emotional Intelligence 2.0*, or through the author's organization, TalentSmart. It was designed as a quick, valid assessment readily available to the public (Bradberry & Greaves, 2009).

Emotional Intelligence Models

Like many traits and skills of a successful leader, EI has been shown to be a learned behavior and that it is possible for adults to develop EI competencies (Bradberry & Greaves, 2009; Goleman, 1995; Zeidner et al., 2004). The learning and subsequent implementation of the skills and competencies identified by the EI assessments presented in this document normally can be identified by two models: the ability model and the mixed model (Cherniss & Goleman, 2001; Khalili, 2012).

The ability model. The ability model is based on the mental abilities of an individual where intelligence is used to guide emotions (Khalili, 2012; MacCann, Joseph, Newman, & Roberts, 2013). In this model, EI is considered a related set of cognitive abilities used to process information and assist in regulating emotion adaptively (Zeidner, Matthews, & Roberts, 2004). Using the ability model, a leader is aware of his emotions and responses and intelligently manages those emotions (Khalili, 2012). Additionally, the ability model has been defined as having the aptitude to process affective information (Zeidner, Matthews, & Roberts, 2004). The ability model is also influenced by age. As an individual gets older, their EI grows just through experience (Mishra & Mohapatra, 2010).

The Mayer Salovey Caruso model and their EI test (MSCEIT) is considered an ability based model. They argue that EI is the ability to perceive and express emotion as



well as the ability to understand and regulate emotions in a manner that promotes growth (Salovey & Sluyter, 1997). The assessment measures an individual's ability to perceive, use, understand, and regulate emotions rather than having an individual self-report their abilities ("MSCEIT," 2014).

The mixed model. The mixed model is one where personality traits are combined with the intelligent management of emotions (Mishra & Mohapatra, 2010). Within the mixed model, EI is viewed as a mixture of both competencies and the ability to adapt and effectively function when dealing with environmental demands (MacCann et al., 2013; Zeidner et al., 2004). These personality traits are typically measurable via some type of performance rating (MacCann et al., 2013). This model has been further defined to not only include the management of emotions, but also the ability to perceive and assimilate emotions (MacCann et al., 2013; Zeidner et al., 2004). The mixed model is often used in a corporate or other professional setting to train and evaluate management potential and skills.

Both the Bar-On and Goleman Model are considered mixed models (Zeidner et al., 2004). Reuven Bar-On's model of EI not only lists specific competencies found within his five identified domains, but goes further and argues that one must not just be effective when using EI but must be "Darwinian" and thrive through the use of EI (Bar-On, 2010, p. 54).

Whether a leader's EI comes from a cognitive ability to understand and knowingly apply emotions effectively, or it originates from a leader's natural ability to adapt to situations, and respond in a manner where attributes of EI are the visible and impactful, EI experts have shown the results to be similar (Sadri, 2012; Whiteoak &



Manning, 2012). These experts and others argue leader's that effectively use EI in the workplace can positively impact things such as associate satisfaction, motivation, turnover, productivity, and other variables, which in turn can lead to competitive advantage for an organization (Cherniss & Goleman, 2001; Sadri, 2012; Whiteoak & Manning, 2012).

Impact of a Leader with Emotional Intelligence

In an organization's drive for competitive advantage and need to remain effective, organizations face many challenges. These challenges often include issues such as changing customer demands, changing labor force, inability to recruit and retain top talent, lean structures, and processes leading to the need for managers to "do more with less" (Bartlett & Ghoshal, 2002). According to Cherniss & Goleman (2001), emotionally intelligent organizations have shown to be more effective at getting their workers to meet these challenges.

In addressing these challenges that impact organizational effectiveness Cherrniss & Goleman (2001) argue EI and more specifically the EI of a leader plays a critical role. Emotions can be very intense and may cause disruption within the workplace. Managers need to be aware of their own emotions as well as the emotions of the workforce and be able to manage those emotions in a way that supports effectiveness and productivity (Bradberry & Greaves, 2009; Goleman et al., 2002). Effective managers use EI in their approach to driving organizational effectiveness by using a more influencing approach rather than commanding. Additionally, managers use EI to help drive effective competitive advantage through more effective leadership, building teamwork, enhancing innovation, and building trust (Cherniss & Goleman, 2001; Power, 2004).



Kossek (2012) argues that organizations are more productive and profitable when there is alignment and congruence between employees and the organization (Kossek, Kalliath, & Kalliath, 2012). This congruence happens most often when leaders exercise aspects of EI such as self-management and relationship-management (Cherniss & Goleman, 2001; Goleman, 2011; Johnson, Venus, Lanaj, Mao, & Chang, 2012).

Numerous EI experts argue that EI has a positive impact on how effective individuals can be in the workplace. EI is said to impact work relationships, management strategies and overall performance (Brackett, Rivers, & Salovey, 2011). There are additional studies that show that individuals who possess higher levels of EI are more successful as individuals within their organizations. In a study of 44 insurance analysts, Lopes, Côté, Grewal, Kadis, Gall and Salovey (n.d.) found that levels of EI were positively related to amount of merit increases, rank within the company, positive peer reviews and positive interactions with their supervisors. A study conducted by Rosete and Ciarrochi (2005) of 117 executives, who were rated high on a management performance system, showed a positive relationship between their levels of EI and their performance management ratings. Mishra and Mohapatra (2010) further supported the idea that EI has a positive impact on business success in their study of 90 executives across multiple organizations. They argue that hiring individuals with high levels of EI can be associated with an organizations financial gain (Mishra & Mohapatra, 2010). Mishra and Mohapatra (2010) further argue that an employee's perception of their supervisor's EI plays an important part in the workplace in that it impacts both general job satisfaction and group task satisfaction. They also found that these perceptions of high EI in the supervisor led to increased employee engagement and reduced turnover



and concluded in their study that hiring emotionally intelligent supervisors should be a goal for organizations (Mishra & Mohapatra, 2010).

Conceptual Framework

The purpose of this study was to examine the relationship between a supervisor's level of EI and the productivity of their direct reports within a distribution environment. The literature review shows that there are numerous studies that measure the individual level of success of leaders who possess high levels of EI and their overall impact on the organization, but there are very few studies that show the direct impact of that leader on the productivity of their direct reports (Cherniss & Goleman, 2001; Mishra & Mohapatra, 2010).

In a distribution environment, the impact a supervisor has on their employees is critical to organizational success ("Skills," 2015). Supervisors provide direction and the results are immediately measured through KPIs such as cases moved per hour, amount of mistake per order, work standard performance level, and many other KPIs ("ABC's," 2015). There are numerous tools that produce these measurements and although numerous distribution environments use computer generated systems to measure KPIs there are just as many that do not measure productivity as accurately. Those distribution environments often rely on aggregated data that cannot be directly tied back to an individual's productivity but rather the productivity of a group of associates. Additionally, many distribution environments do not directly measure productivity and instead measure the financial performance of the organization as a measure of effectiveness (Staudt, Alpan, Di Mascalo, & Taboada Rodriguez, 2015; Johnson & McGinnis, 2011).



As the literature shows, EI can be viewed through the lens of either an ability model or as a mixed model and can be measured using numerous tools ("EI Consortium," 2015). This study will use Goleman's mixed model (Cherniss & Goleman, 2001; Zeidner et al., 2004) as a framework to discuss the competencies of self-awareness, self-management, social- awareness, and relationship management. Through a series of interviews, surveys, and the use of the Bradberry and Greaves assessment, Emotional Intelligence Appraisal®—Me Edition (TalentSmart website, 2015), this research will help identify how the components of EI are viewed and used within a distribution environment. An additional objective of this research is to understand the impact, that levels of EI possessed by a supervisor in a distribution environment has, on the productivity of those warehouse associates that work directly with the supervisor.

Conclusion

This chapter reviewed the themes that represent the conceptual framework of this study: productivity within a distribution environment and the impact of the EI of a supervisor. An explanation of supply and demand was provided by reviewing a distribution simulation known as "the beer game" and reviewing its resulting "bullwhip effect" (MacDonald et al., 2013).

The literature review included a discussion on the history of EI. This included a discussion on general intelligence "g" and the major milestones, which have led to today's theory of EI. Spearman's model of general intelligence was introduced and how it led to further discussions of social intelligence and multiple intelligences (Gardner, 1983; Spearman, 1904; Thorndike, 1920). The review presented the major contributors to the theory of EI: Reuven Bar–On, Mayer and Salovey, Daniel Goleman, and Bradberry



and Greaves. Additionally it presented their specific assessment models, (Consortium for Research on Emotional Intelligence in Organizations website, n.d.).

The influence of leadership has been shown to be instrumental to the success of any organization. The review demonstrated that a leader's EI has a correlation to both the success of the leader and the engagement of the associates that work for them.

The literature shows that although there is research that quantifies the impact a leader with high EI may have on an organization, there is very little research that analyzes the impact of a supervisor's EI and the impact it has on an associates' productivity.

All of the elements reviewed comprise the framework supporting the overall need for this study and the resulting methodology in which it will be examined.



CHAPTER III: METHODOLOGY

Overview

Chapter III describes procedures and methods used in the conduct of this study. Specifically it includes the following: purpose statement; research questions; research design; a discussion of how the population and sample of the participants were identified and selected; a description of the instrument used for the study; a discussion of procedures used for collecting data; methods used for the analysis of the data; and a description of the limitations of this study.

Purpose Statement

The purpose of this qualitative study was to explore and describe the impact of a supervisor's EI on the productivity of the associates that work for them within a distribution environment. The research design of this study will include identifying supervisors with high levels of EI through the administration of the Emotional Intelligence Appraisal®—Me Edition and then will include the gathering of data through semi structured interviews from the identified associates that work for them.

Research Questions

- 1. How do warehouse associates describe the impact of their immediate supervisor's overall Emotional Intelligence on their daily performance within a distribution center?
- 2. What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?
- 3. What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?



- 4. What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?
- 5. What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?

Research Design

Through the use of a qualitative, multiple case study approach (Creswell, Plano-Clark, Gutmann, & Hanson, 2003), this study will examine the linkage between a supervisor's EI, as described by the associates through semi-structured interviews, and measured through the Emotional Intelligence Appraisal®—Me Edition, and the impact it has on their direct reports' productivity as described by the associates through semi-structured interviews.

Non-Experimental

This study will be non-experimental and not require the introduction of a treatment or an intervention in order to observe behavior (Patten, 2012). The researcher will collect qualitative data by conducting semi-structured interviews with warehouse associates to explore the perception they have of their supervisor's EI and its impact on the their productivity. Quantitative data will then be collected through the use of an instrument to measure the variable EI, the Emotional Intelligence Appraisal®–Me Edition.

Qualitative

According to McMillan and Schumacher (2010), "Qualitative research is more concerned with understanding the social phenomenon from the participant's perspective" (p. 12). Qualitative research utilizes inquiry methods such as collecting documents,



conducting structured and semi-structured interviews and observations, and written documents as data-collection techniques to capture how participants make sense of the phenomenon being studied (Creswell, 2003).

Using qualitative data, researchers gather data through the use of things such as open-ended questions and interviews that are subjectively analyzed so themes of the participants can be identified (Patten, 2012). In contrast, quantitative research allows for the researcher to gather data in a manner that allows the data to be easily quantified and statistically analyzed while providing objectivity to the results (McMillan & Schumacher, 2010; Patten, 2012). In exploring the impact of EI amongst supervisors in a distribution environment, the use of quantitative measurements did not provide a complete picture of its impact on the associates and their productivity. McMillan and Schumacher (2010) state that qualitative designs "emphasize gathering data on naturally occurring phenomena" (p. 23). This study was conducted using a qualitative, multiple case study approach (Creswell & Plano, 2011). This design allowed the researcher to collect both qualitative and quantitative data during a single phase of the study (Creswell & Plano, 2011). As quantitative data was collected relating to the EI levels of selected supervisors, qualitative data was collected through semi-structured interviews of the associates that work for those supervisors to help further explain and explore the impact of the supervisors EI level on the productivity of the associates.

Multiple Case Study

McMillan and Schumacher (2010) define a case study design as an "in-depth analysis of a single entity" (p. 344). The purpose of this research was to explore and describe the impact that a supervisor's EI level has on associates' productivity within a



distribution center. To add depth to the study, multiple organizations were solicited to participate in the research.

Population and Sample

Population

The target population is the group of elements, which conform to specific criteria, for which the researcher intends to use to generalize the results of the study (MacMillan & Schumacher, 2010). The target population for this study was supervisors within the distribution industry. The manner in which units of study are selected and the description of the participants is important in interpreting the results and in making generalizations of findings (MacMillan & Schumacher, 2010). Once the target population was defined, the researcher, using data collected through the Bureau of Labor and Statistics, identified the sample frame of supervisors ("Distribution," 2012). This data showed that in California there are approximately 4,508 supervisors within the distribution industry.

Sample

Convenience, purposeful sampling was used to create a subgroup based on location (Vogt, 2005). McMillan and Schumacher (2010) state that within convenience sampling "...the researcher uses subjects who happen to be accessible or who may represent certain types of characteristics" (p. 136). Food distribution companies located in Southern California were solicited for participation in the study. Based off of the geographic location of the distribution companies in relationship to the researcher, the following companies were selected using convenience sampling to participate in the survey (Table 4):



Table 4
Participating organizations

Company	Supervisors	
Company A	12	
Company B	6	
Company C	16	
Company D	2	
Company E	10	
Company F	5	
Total Supervisors	51	

The sampling frame used for this study was 51 supervisors within a food distribution environment in Southern California. With an average span of control of 18 direct reports this group supervises approximately 918 warehouse associates. This sampling frame of 51 supervisors was further refined through a purposeful sampling of supervisors identified by key executives within each of the organizations (McMillan & Schumacher, 2010). Patten (2012) states that purposeful sampling is used when individuals or groups are selected who are believed to be good sources of information. Key executives were asked to identify two supervisors within their organization that they felt led highly productive teams of warehouse associates. This process led to the identification of a survey sample of 12 supervisors that would be asked to participate in the study by taking the Emotional Intelligence Appraisal®—Me Edition.



Along with the feedback from executives from each of the companies, additional criteria was used to assist in providing the researcher with rich data to analyze.

Supervisors were selected to participate in this study using the following criteria:

- Supervisors who have been in their current positions for at least 12 months and are responsible for the day-to-day supervision of warehouse associates.
- Supervisors who have been identified by their executive leadership team as leading highly productive teams of warehousemen.
- Supervisors who were willing to commit time to this study through participation in an EI assessment.

Based on the above criteria, each participating organization identified one or two supervisors they believed led highly productive team and met the additional criteria. This provided a survey sample of nine supervisors to participate in the study.

Along with identifying supervisors for participation in the study, executives were also asked to identify two associates that work for the identified supervisor that met the following criteria:

- Warehouse associates that have been identified by their executive leadership team as being highly productive.
- Warehouse associates that were willing to commit time to this study through participation in an interview and possible follow-up questioning.

This selection process provided a sample of 18 warehouse associates that participated in semi-structured interviews that provided rich qualitative data to be analyzed.



Instrumentation

The researcher used both qualitative and quantitative instruments in conducting this research. Qualitative data was collected using semi structured, open-ended interview questions with warehouse associates. This allowed associates to give individual responses as opposed to selecting an answer from a predetermined list (McMillan & Schumacher, 2010; Ritchie & Lewis, 2003). Quantitative data was collected through the results of an EI assessment administered to the supervisors; and from the quantitative ratings collected as part of the interview process.

Interview Instrument

An interview protocol was developed that included both qualitative and quantitative questions. The interview protocol sought to collect the perceptions from warehouse associates about the impact their supervisors EI had on their own productivity. The protocol included questions that specifically explored each associate's perception of their supervisor's level of self-awareness, self-management, social-awareness, and relationship management EI characteristics (Appendix B). The protocol included a quantitative list of attributes an associate may consider important for a supervisors to have and that would assist the associate in being their most productive. The associates were asked to group the attributes into four groups: (1) those that are essential; (2) those that are important; (3) those that are desirable but not as important as those in group 1 or 2; and (4) those attributes that are not deemed as impactful in regards to assisting an associate with their productivity.



Instrument Development

The Interview protocol was designed in collaboration with two other researchers. These researchers were doctoral students also engaged in the development of an instrument that measures EI through both qualitative and quantitative data. The researchers conducted literature reviews to help ensure the four domains of EI were thoroughly addressed in the interview protocol. Upon completion of a literature review, a general interview protocol was designed. To ensure the interview protocol would be effective, it was further modified to ensure it addressed the population and sample for this study. Creswell (2003) states that it is important to establish the content validity of an instrument in order to improve questions, format, and scales (Creswell, 2003, p. 18). Upon completion of the design of the interview protocol for this study, its content was further validated through the use of an expert panel to review the protocol and actual field testing of the instrument.

Expert Panel

To ensure the quality of the interview protocol, a panel of experts was utilized to review and provide feedback on the interview questions (McMillan & Schumacher, 2010; Patton, 2012) and field-testing (Patton, 2012) was conducted of the instrument to assist in establishing its validity and reliability. Selection of the panel members was based off of them meeting the following criteria:

- Expertise in instrument development
- Ten or more years of experience in conducting in depth, semi-structured interviews
- Experienced with data collection



The following experts were asked to review the draft instrument and provide feedback:

- The vice president of human resources, from a food distribution company
- The vice president of a management consulting firm
- Dr. Jim Cox, author of Your Opinion Please, How to Build the Best Questionnaires in the Field of Education, (Cox & Cox, 2008)

Each panel member was emailed a copy of the purpose statement and research questions for this study, along with a copy of the interview protocol, and asked to provide feedback. Based upon their feedback, questions that needed to be reconstructed or did not align with the purpose of the research were revised (McMillan & Schumacher, 2010). Additionally, if questions were deemed as "leading" as opposed to prompting, they were also revised. Once there was consensus amongst the panel that the instrument was indeed aligned with the research purpose, the instrument was field tested.

Field Testing

To ensure the validity and reliability of the interview instrument prior to conducting the actual study, a field test was conducted (Fink, 1996). The field test allowed the researcher to make improvements to the instrument and to ensure that it collected the data it was intended to collect. Additionally, the field test allowed the researcher the opportunity to understand the logistics needed to ensure a timely and effective interview.

The field test was conducted by interviewing three warehouse associates in a food distribution environment. The associates were similar to the intended population of this study but were outside the identified sample (McMillan & Schumacher, 2010). This field



understood and it provided an opportunity for the researcher to ensure the questions were asked in a manner that elicited responses that would provide an in-depth insight into the associates perceptions of the levels of EI in their supervisors (McMillan & Schumacher, 2010).

Emotional Intelligence Assessment

As part of the collection of quantitative data, a sample of supervisors were asked to take the Emotional Intelligence Appraisal®–Me Edition. According to TalentSmart, the Emotional Intelligence Appraisal®–Me Edition "...offers feedback on overall EI and the 4 core skills" ("Me Edition," 2015). Supervisors were educated on the purpose of the evaluation, and the results it produced. Each supervisor was provided a sample personal report from the Emotional Intelligence Appraisal®–Me Edition. Upon completion of the education and review of the sample report supervisors were asked if they would voluntarily take the assessment. Those supervisors volunteering were asked to sign an informed consent form (Appendix C) that allowed the researcher to review all results for comparison reasons and to use as part of the overall evaluation. Once the release was signed and the assessment was taken, supervisors received a copy of their personal report along with an individual development plan that provided insight and advice on how to improve their EI scores. The researcher had access to the results via the administrator site provided by TalentSmart.

The results of the assessment helped explore and explain the impact of the supervisor's level of EI and the associate's productivity. The assessment provided



ordinal data (Patten, 2012, p. 107), which allowed the researcher to rate the level of EI amongst participating supervisors using the following scale in Table 5:

Table 5
EI level categories

Range	Descriptor
90-100	A Strength to Capitalize On
80-89	A Strength To Build On
70-79	With a Little Improvement, This Could Be a Strength
60-69	Something You Should Work On
59 and Below	A Concern You Must Address

To ensure participating supervisors had identifiable levels of EI, only those supervisors who took the EI assessment, and received an overall score of 60 or above—identified by Emotional Intelligence Appraisal®—Me Edition, as "Something You Should Work On," "With a Little Improvement, This Could Be A Strength," "A Strength to Build On," or "A Strength to Capitalize On" were considered for further participation in the study.

Instrument Validity and Reliability

Ritchie and Lewis (2003) argue that in order for research to be generalizable to a larger population it must be reliable and have validity, or in their words it must be "sustainable" and "well grounded" (Ritchie & Lewis, 2003). In order for research to be reliable, it should be able to be used again with similar or repeatable results and the requirements used to determine the tools and measures should have been rigorously derived (Ritchie & Lewis, 2003). Patten (2012) states that these measures, in order to be considered valid, must be designed to measure and accurately perform the function(s) they are purported to perform (p. 61).



Interview Instrument

In order to ensure the interview instrument accurately measured what it was designed to measure (McMillan & Schumacher, 2010), rigorous efforts were taken to ensure the instrument remained unchanged during its use. To assist in achieving this goal, a script was designed to aid the researcher in maintaining consistency during the interview process. Additionally, through the use of content mapping and content mining type questions, EI was discussed in general terms and then explored in detail (Ritchie & Lewis, 2003).

Reliability of the interview process was achieved using multiple processes. An exhaustive review of literature was conducted in the areas of distribution, productivity and the EI of leaders. Through the use of an expert panel, field testing, and interrater reliability, the consistency and quality of results were significantly enhanced (Patten, 2012; Ritchie & Lewis, 2003).

Emotional Intelligence Assessment

Numerous EI instruments were reviewed in preparation for this study. The selection process focused on costs of the instrument and associated documentation such as handbooks and user manuals and whether the researcher required certification to administer the instrument. A review of the Multi-Health Systems website along with the TalentSmart website was conducted to gather the below information in table 6:

Table 6
Instrument costs

Instrument	Cost Per Unit	Additional Items Required	Certification
Bar-On Emotional Quotient Inventory	\$270	Yes	Yes



Mayer-Salovey-Caruso-EI	\$23	Yes	Yes
Test (MSCEIT)			
Emotional & Social	\$69	Yes	Yes
Competence Inventory			
Emotional Intelligence	\$49	No	No
Appraisal®-Me Edition			

(Multi-Health Systems website, 2015; TalentSmart website, 2015)

After a review of the selected instruments, the Emotional Intelligence Appraisal®–Me Edition was selected. Although cost was a significant driver in the selection of the instrument, the Emotional Intelligence Appraisal®–Me Edition is still held to rigorous standards in regards to design and validation (TalentSmart website, 2015).

TalentSmart has conducted hundreds of thousands of surveys and has found that the Emotional Intelligence Appraisal®–Me Edition has been able to explain almost 60% of variance in the job performance of leaders (TalentSmart, 2015). Analyses of these surveys show that reliability across all four domains of EI is strong and produces coefficient alphas ranging from 0.79 to 0.92 (TalentSmart, 2015).

Data Collection

Institutional Review Board

The researcher received permission (Appendix D) of the Brandman University Institutional Review Board (BUIRB) to conduct the research and collect data using the interview protocol, productivity reports, and results of the EI assessment. The BUIRB has the responsibility of reviewing all research projects involving humans, approving only research that maintains the appropriate professional standards.

After receiving approval from the BUIRB, the researcher contacted the previously identified organizations to seek permission to begin the research.



Selection of Organizations

Organizations selected to participate in the research were contacted to solicit their participation using numerous methods. Using a directory of logistics organizations found on the International Warehouse Logistics Association website ("Locations," 2015)

Southern California distribution companies were identified within 50 miles of the researcher's location. The same directory provided names and company addresses of key executives. After further filtering the directory to organizations that distributed food products, a list of 12 organizations were selected for participation.

Once the initial list of organizations were identified, contact was made with key executives through phone calls, emails, and traditional mail requesting an opportunity to present the research proposal. Of the twelve organizations that were identified and contacted, eight organizations agreed to review the research proposal and would consider participation. Of those eight organizations, six further agreed to participate in the research.

Selection of Participants

During a follow-up phone call with participating organizations, executives were asked to identify supervisors that they believed supervised highly productive teams.

Once these supervisors were identified, the researcher scheduled a date and time to conduct a meeting with that group in order to present the research proposal and solicit the participation of the supervisors. Participating supervisors were asked to take the Emotional Intelligence Appraisal®–Me Edition to further identify supervisors considered to have significant levels of EI. Only organizations whose supervisors received an overall score of 60 or above—identified by Emotional Intelligence Appraisal®–Me



Edition as "Something You Should Work On," were selected for further participation in the study. These selected organizations were then asked to identify warehouse associates that worked for the selected supervisors and were considered to be highly productive. Once these associates were identified, the researcher met with them to present the proposal and request their participation in the interview process. Those associates that agreed to participate were provided the informed consent form and were asked if they would also participate in follow-up interviews if needed.

Interview Process

Once associates agreed to participation in the research, initial interviews were conducted immediately. Participants were again informed of the nature of the study and reminded that their responses would be kept confidential. Additionally, associates were informed that the interview would be recorded and hand written notes would be taken to ensure the accuracy of the transcription of the information.

Semi-structured interviews are considered one of the most widely used type of measures used during qualitative research for collecting data (Patten, 2012). Using the previously constructed semi-structured interviews, data was collected on the associates' perception of their supervisor's EI and the impact they believed it had on their own level of productivity.

The same interview protocol was used for all participating associates to ensure consistency amongst the participants. Once initial responses were given to the interview questions, the researcher followed up with additional open-ended questions to further probe and understand the responses. Upon completion of the interview, the participants were asked for any closing remarks, they were also thanked for their time and



participation, and reminded that they may be asked to participate in a follow-up interview.

Emotional Intelligence Assessment

Supervisors identified as leading highly productive teams by their executives were asked to participate in taking the EI assessment. Once the identified sample of supervisors was selected, the researcher delivered a presentation that provided an overview of what the research intended to identify and the methods that would be used. Additionally, the researcher provided and explained the informed consent forms and provided a sample copy of the Emotional Intelligence Appraisal®—Me Edition to the supervisors.

After receiving the informed consent forms back from the supervisors, each supervisor was emailed a link which took them to an electronic version of the Emotional Intelligence Appraisal®–Me Edition instrument. Their results were collected and evaluated electronically.

Data Analysis

According to Ritchie and Lewis (2003), qualitative data can be voluminous and messy. To sort through qualitative data, a common process of identifying key themes, categories, and patterns is used. This study followed an inductive analysis approach which included four phases: field work, recording of data, coding and categorizing, and the identification of themes and patterns (McMillan & Schumacher, 2010, p. 368).

Transcription of Interview Data

The interviews conducted resulted in the collection of both quantitative and qualitative data. Each interview was recorded and field notes were taken. To assist in



identification of themes and patterns the data was transcribed using Nvivo for Windows software. The use of this software allowed the researcher to effectively identify key words, statements, and ideas collected from the interviews that would help identify categories and themes. A recursive analysis (McMillan & Schumacher, 2010, p. 377) was used to form and continually validate identified categories. According to McMillan and Schumacher (2010), a recursive analysis can also be called constant comparison where the researcher is continually searching for data that is both supportive and contrary to the meaning of the emerging categories.

Field notes are instrumental in the conducting of a qualitative analysis (Patton, 2002). Along with the audio recordings used during the conducting of interviews, field notes were taken.

Coding of Data

The field notes and audio recordings were transcribed and then analyzed using NVivo for Windows. After an initial review of the transcribed field notes, the data coding process began by breaking the transcribed interviews into smaller segments of data. This data represented categories and themes. Through the use of NVivo, codes were applied to the segments of data to help categorize the data. A code is a name or phrase that is used to provide meaning to a segment of raw data (McMillan & Schumacher, 2010). Once the data was coded, the researcher was able to conduct searches and perform queries that further assisted in the recursive analysis (McMillan & Schumacher, 2010). This allowed the researcher to analyze the data and explore the relationship between the associates' level of productivity and their supervisor's level of emotional intelligence.



Interrater Reliability

There are numerous obstacles to coding. One obstacle may be the researchers own bias. This may lead the researcher to see patterns that may not tell the appropriate story. Other challenges are trying to actually find patterns or trying to figure out what things fit together (Patton, 2002). By using multiple coders a researcher can use interrater reliability to try and reduce this bias and help develop consistency (McMillan & Schumacher, 2010; Patton, 2002).

Through collaboration with two additional researchers conducting research on the impact or EI, interrater reliability was used throughout the data collection process and during the coding of key themes and categories to minimize bias. The additional researchers were asked to review the coding and identify any themes they disagreed with or that they believed were not properly identified. Any significant differences in the coding were identified and discussed and recoding was conducted on agreed upon themes.

Emotional Intelligence Assessment

The data from the participating supervisors was received immediately upon completion of the assessment. The assessment provided ordinal data that allowed the researcher to categorize the supervisor's level of EI from high to low (McMillan & Schumacher, 2010). This information was compared to the patterns and trends that emerged during the qualitative data coding process.

Triangulation

Through the use of several data collection methods, the researcher was able to add reliability to the overall findings of the research through the use of triangulation



(McMillan & Schumacher, 2010). According to Ritchie and Lewis (2003), "Triangulation assumes that the use of different sources of information will help both to confirm and to improve the clarity or precision, of a research finding" (p. 275). After identifying themes and patterns that emerged as a result of the coding of the qualitative data collected during the interview process, the researcher was able cross-validate those findings to the supervisor's assessment results.

Limitations

All research designs have limitations (McMillan & Schumacher, 2010). Those limitations can come in many forms. This study and population sample was based off of a convenience sample of participants. The participants were selected based on their location in reference to the researcher and in reference to the Ports of Los Angeles and Long Beach. Additionally, the population was selected based on the type of product they distribute. Therefore, the population is limited to geographical location and product distribution. According to the Bureau of Labor and Statistics, the population of associates in the distribution industry is approximately 175,000. This group is being managed by more than 8,200 supervisors ("BLS," 2012). To create a more manageable study the following delimiting variables (McMillan & Schumacher, 2010) have been identified.

Industry specific: Based on convenience and understanding of the sample,
distribution was further broken down into the subgroup Food Distribution. This
group has been selected based on turnover of the product. The turnover of
product within distribution environments has significant variance which often
impacts the interaction between manager and associate.



- 2. Skillset Specific: Based on the significant amount of interaction between supervisors and associates, the researcher studied the productivity of associates specifically within the warehouse environment of a distribution company. There are numerous other functions within a distribution environment such as delivery, customer service, purchasing, etc. These functions or skillsets often require less interaction between supervisor and associate. The results or predictions made from the data collected may not be indicative or easily generalized to a larger population that may include other skill sets such as delivery, customer service, purchasing, etc.
- 3. Location: Based on the location of the researcher and the location of the Ports of Los Angeles and Long Beach, the study only included Food Distribution companies located in the Southern California area. The port of Los Angeles is ranked as the 16th busiest port in the world and the highest in container volume in the United States ("Port of LA," 2014). There are more than 360 commercial ports in the United States ("U.S. Ports," 2014). The volume of imports has a significant impact on the volume of product kept within a distribution center. This metric could impact the interaction between supervisor and associate and results of the study may not be effectively generalized to an area where port volumes are much lower.

Summary

This chapter outlines the design of the research, the instrumentation and data collection processes, along with limitations of the study.



The purpose of this qualitative study was to identify whether the skills of a supervisors have an impact on the productivity of the associates that work for that supervisor. Through the use of a qualitative, multiple case study approach the researcher was able to conduct interviews as well as record and analyze variables already in existence within a distribution center. Convenience sampling of the distribution environment allowed the researcher to identify six organizations that distribute food within Southern California. After contacting these organizations and soliciting their participation, 9 supervisors were asked to participate in the study.

This chapter reviewed the purpose and research questions used in this study along with the methodology and research design. This chapter also discussed the instruments used, validity and reliability, data collection, and analysis processes. Chapter IV will further discuss the research and data collection and will present the findings of this qualitative study.



CHAPTER IV: RESEARCH, DATA COLLECTION, AND FINDINGS

In today's global economy, organizations have a tremendous need to perform in order to remain competitive (Cherniss & Goleman, 2001). Organizational consultants have long argued that there is a positive relationship between an organization's human climate and its performance. More specifically, they argue that the climate created within an organization can account for more than 20 to 30% of performance (Cherniss & Goleman, 2001; Goleman, Boyatiz, & McKee, 2002). Research also shows that 50 to 70% of associates trace the climate of the organization to the actions of the leader they work for (Goleman, et al., 2002). According to Goleman et al. (2002), a leader's emotional state and actions affect how the people they lead will perform.

This chapter provides a detailed reporting of the levels of EI found within nine supervisors that work in a distribution environment, as measured using the Emotional Intelligence Appraisal®—Me Edition, and the impact EI has on the associates that work for them, as described through semi-structured interviews. The purpose of this study along with the research questions, methodology, and population of the study are also reviewed. Finally, the data is presented and grouped by supervisor response, and overall themes provided by associate interviews are offered to further answer each research question.

Purpose Statement

The purpose of this qualitative study was to explore and describe the impact of a supervisor's EI on the productivity of the associates that work for them within a distribution environment. The research design of this study included identifying supervisors with high levels of EI, through the administration of the Emotional



Intelligence Appraisal®–Me Edition assessment, and then included the gathering of data through semi-structured interviews from the identified associates that work for them.

Research Questions

- 1. How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?
- 2. What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?
- 3. What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?
- 4. What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?
- 5. What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?

Methodology

This qualitative study used both the results of an EI assessment administered to nine supervisors in a warehouse environment and semi-structured, open-ended questions used during interviews with warehouse associates to determine the perceptions those associates have in regards to the supervisor's level of EI and its impact on their own productivity.

The identified supervisors were asked to take the Emotional Intelligence

Appraisal®–Me Edition, which measured their level of EI. The associates that worked

with those supervisors participated in a four-question interview. Question 1 was an initial



question to open up the interview conversation and gather general information regarding the behaviors they hope to see within the supervisors with which they work. Question 2 contained a 24-item questionnaire that allowed associates to categorize the attributes that they may see within their supervisors and the impact that those attributes may have on their effectiveness and productivity. The attributes were categorized as: (Group 1) those that have significant impact on your effectiveness; (Group 2) those that have some impact on your effectiveness; (Group 3) those that have little impact on your effectiveness; (Group 4) and those attributes that have no impact on your effectiveness at work. Question 3 probed the EI component that the associate found most impactful during the ranking exercise in Question 2. Finally, Question 4 allowed associates to identify any additional characteristics they felt had a significant impact, some impact, little impact or no impact on their effectiveness and productivity.

The participating supervisors were emailed a linked to the EI assessment after their informed consent was received. The researcher was notified via the Talent Smart website when the supervisors had completed the assessment. Each participating supervisor took the assessment within 24 hours of receiving the invitation. The associates that worked for the identified supervisors were interviewed in a private conference room within the facility in which they worked. The interviews were recorded for validity and then transcribed. Each transcription was reviewed and checked for accuracy. The responses to the questionnaire containing the 24 attributes were entered into a Microsoft Excel spreadsheet in order to analyze responses.

The transcripts were uploaded to and analyzed with NVivo, a software solution that assists with the analysis of qualitative data. The transcripts were then coded for



patterns and trends. According to Patton (2002), "This essentially means analyzing the core content of interviews to determine what is significant" (p. 463). The main themes and patterns were gathered to identify the patterns and trends, and to identify differences amongst the associate's data collected to understand the impact a supervisors level of EI has on the effectiveness and productivity of the associate.

Population and Sample

The target population is the group of elements, which conform to specific criteria, for which the researcher intends to use to generalize the results of the study (MacMillan & Schumacher 2010). The target population for this study was supervisors within the distribution industry. The manner in which units of study are selected and described is important in interpreting the results and in making generalizations of findings (MacMillan & Schumacher, 2010). Once the target population was defined, the researcher, through the use of data collected from the Bureau of Labor and Statistics (BLS), identified the sample frame of supervisors ("Distribution," 2012). This data showed that in California there are approximately 4,508 supervisors within the distribution industry.

Convenience, purposeful sampling was used to create a subgroup based on location and convenience (Vogt, 2005). Food distribution companies located in Southern California were solicited for participation in the study. Through the use of direct mailing along with other commercial tools such as LinkedIn, a social network designed for working professionals, six organizations were identified and agreed to participate in the research. These organizations provided either one or two supervisors that met the following criteria:



- Supervisors who have been in their current positions for at least 12 months and are responsible for the day-to-day supervision of warehouse associates.
- Supervisors who have been identified by their executive leadership team as leading highly productive teams of warehousemen.
- Supervisors who were willing to participate in an EI assessment.
 In addition to the supervisors, executives also identified two associates that worked for each of the identified supervisors that met the following criteria:
 - Warehouse associates that are considered productive.
 - Warehouse associates that were willing to commit time to this study through participation in an interview and possible follow-up questioning.

This selection process provided a sample of 9 supervisors and 18 warehouse associates that participated in either an EI assessment or semi-structured interviews. Table 7 provides a breakdown of the participants in this study.

Table 7

Breakdown of Supervisors and Associates in Study

Participant	Associate	Organization	County
Supervisor 1	Associate 1A, 1B	Company A	Los Angeles
Supervisor 2	Associate 2A, 2B	Company A	Los Angeles
Supervisor 3	Associate 3A, 3B	Company B	Los Angeles
Supervisor 4	Associate 4A, 4B	Company B	Los Angeles
Supervisor 5	Associate 5A, 5B	Company C	San Bernardino
Supervisor 6	Associate 6A, 6B	Company C	San Bernardino
Supervisor 7	Associate 7A, 7B	Company D	Riverside
Supervisor 8	Associate 8A, 8B	Company E	San Bernardino
Supervisor 9	Associate 9A, 9B	Company F	Los Angeles

Data Analysis

The focus of this research was to understand the impact the EI of a supervisor has on the daily performance of associates in a distribution environment. To understand this, the researcher first sought to understand the level of EI amongst the participating supervisors through the use of the Emotional Intelligent Appraisal®—Me Edition. This provided both a quantitative and qualitative description of the level of overall EI ability and the four specific domains of EI each supervisor possessed. The researcher then sought to understand the perception of the supervisors' EI as described by the associates and the impact they have on the associates' daily performance. This data was gathered during the semi-structured interviews conducted with the associates.

The data from this study was analyzed and organized in two ways. First, the results from each supervisor's Emotional Intelligent Appraisal®–Me Edition were studied and individual EI components were organized from highest to lowest. Then the results from the semi-structured interviews conducted with associates that work for the identified supervisors were studied to identify themes and patterns. Along with asking associates about behaviors they hope to see in their supervisors, they were asked to group a list of attributes associated with EI into the categories of those that have significant impact; those that have some impact; those that have little, and those attributes that have no impact on their effectiveness at work. Once the associates grouped the attributes according to the impact they have on their effectiveness at work, the groupings were studied to identify how they aligned with the four domains of EI: self-awareness, self-management, social awareness, and relationship management. This was then followed by



additional probing questions in regards to the EI domain they identified as most impactful on their effectiveness.

Data Analysis per Supervisor

Supervisor 1. Supervisor 1 was one of two supervisors identified within a distribution company in Los Angeles County. Table 8 summarizes the scores and themes from Supervisor 1's results of the Emotional Intelligence Appraisal®–Me Edition.

Table 8
Supervisor 1: Assessment Results

EI Domain	Score	Overall Classification ¹
Overall	67	Something You Should Work On
Self-Awareness	69	
Self-Management	77	
Social Awareness	61	
Relationship Management	59	

Determined by the Emotional Intelligence Appraisal®–Me Edition

Table 9 summarizes the themes and patterns identified during the semi-structured interviews conducted with two associates that work with Supervisor 1.

Participant 1: Themes in Responses to Research Questions

Research Questions	Themes in Responses
How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?	 Uplifting It eases the workload It keeps work tasks running smoothly



Table 9

What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?

What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?

What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?

What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?

- Provides consistency
- Provides confidence in supervisor
- Gives associates clear expectations
- Provides confidence to associates
- It makes the work flow seem easier
- Keep associates from showing stress
- It keeps everyone on track working
- Supervisors understand associates needs
- Supervisors are more open to feedback
- Makes associates want to do more
- Keeps everything running smoothly
- Keeps everyone acting professional

Research question 1. The first research question was, "How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?"

Supervisor 1 had an overall EI score of 67. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "Something You Should Work On."

Associate 1A stated that in regards to when the associate sees attributes of EI in his supervisor, "That gives an uplifting. It does give you more responsibility to do better, to achieve a little bit more." Associate 1A went on to further say, "When you don't get that, you kind of run empty or you kind of run into a dead end. Where if you did put out, nobody would notice."



According to associate 1B, when the associate sees the supervisor using EI, "It just keeps everything running smoothly." Associate 1B went on further to say that when they see the supervisors displaying EI "everything's pretty consistent with professionalism."

Both associates indicated that they feel they have a good relationship with their supervisor and they work more effectively because of the way the supervisor interacts with them.

Research question 2. The second research question was, "What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 1 had a Self-Awareness score of 69. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "Something You Should Work On."

Associate 1A had seven references during their interview that helped describe their perception of the impact their supervisor's self-awareness has on their daily performance. This associate stated that when his supervisor displays attributes of self-awareness, such as a sense of humor and self-confidence, they feel more comfortable addressing work related issues with him. Associate 1A further states that this helps keep the work running effectively when issues are addressed faster by allowing the associates to return to working productively quicker.

Associate 1B also had seven references during their interview that helped describe their perception of the impact their supervisor's self-awareness has on their daily performance. Associate 1B discussed the supervisor's level of conscientiousness in that



he continually ensures he understands the changing work and that it is communicated accurately and effectively to the team. This associate stated that this gives the appearance to the associates that the supervisor "always knows what he is doing."

Research question 3. The third research question was, "What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 1 had a Self-Management score of 77. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "With A Little Improvement, This Could Be a Strength."

Associate 1A made four references to his supervisor's self-management and how it impacted their own performance. He stated that when he sees behaviors of self-management in his supervisor, "It gives me the confidence and the ability just to come in and not have no worries of anything [sic]."

Associate 1B made two references in regards to the impact his supervisor's self-management has on their own daily performance and stated that the supervisor, "...doesn't like to look like he's upset over anything." Associate 1B went on further to state this makes the supervisor more approachable, which makes raising issues easier.

Research question 4. The fourth research question was, "What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 1 had a Social Awareness score of 61. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "Something You Should Work On."



Associate 1A made four references to his supervisor's social awareness and how it impacted his own performance. Associate 1A shared that his supervisor is quick to help when he sees that associates need help to complete a task. Associate 1A states that this sets a great example and causes other associates to do the same. Specifically, associate 1A stated, "If you see somebody helping, then everybody is looking, okay, he's bringing it [sic]."

Associate 1B stated that he believes the supervisors can relate to the job they are doing because that is his professional background and that he started as a warehouseman. Associate 1B further stated that, "He works well with us. He kind of, you know, has a good understanding of what we have to do on a daily basis."

Research question 5. The fifth research question was, "What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 1 had an overall Relationship Management score of 59. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Concern You Must Address."

Associate 1A made seven references to his supervisor's relationship management and how it impacted his own performance. Associate 1A made numerous statements such as, "He's outgoing with us," "He comes in with a game plan," and "It makes me want to be here at work."

Associate 1B made eleven references to their supervisor's level of relationship management and how it impacts them when they see it. Associate 1B stated he likes when the supervisor is accepting of feedback and provides feedback professionally.



Associate 1B stated in regards to how that impacts their effectiveness, that "it just keeps everything running smoothly."

Supervisor 2. Supervisor 2 was the second of two supervisors identified within a distribution company in Los Angeles County. Table 10 summarizes the scores and themes from Supervisor 2's results of the Emotional Intelligence Appraisal®–Me Edition.

Table 10
Supervisor 2: Assessment Results

EI Domain	Score	Overall Classification ¹
Overall	89	A Strength To Build On
Self-Awareness	94	
Self-Management	87	
Social Awareness	83	
Relationship Management	93	

Determined by the Emotional Intelligence Appraisal®–Me Edition

Table 11 summarizes the themes and patterns identified during the semistructured interviews conducted with two associates that work with Supervisor 2.

Participant 2: Themes in Responses to Research Questions

Research Questions	Themes in Responses
1. How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?	 Positive and Motivating Gets associates going Creates a level of comfort and relaxation in the workplace



Table 11

- 2. What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?
- 3. What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?
- 4. What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?
- 5. What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?

- Supervisors shows positivity
- Issues are addressed faster
- Supervisor is more helpful
- Shows that supervisors wants to work with associates
- Associates feel less stressed and comfortable
- Associates are aligned with supervisors
- Lifts morale
- Supervisor listens
- Shows that supervisor wants to be there
- Supervisor cultivates relationship
- Helps get associates going to get the job done

Research question 1. The first research question was, "How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?"

Supervisor 2 had an overall EI score of 89. According to the Emotional

Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

According to associate 2A, in regards to when they see the attributes of EI in the supervisor, "He'll keep his calm, he'll keep his composure, and he'll try to explain it as best he can." Associate 2A went on to discuss a recent system failure and the negative impact he felt it had on morale and that the supervisor's behavior is what got the whole team through the failure and brought morale back up.



According to associate 2B, when they see the supervisor using EI, "If anything happens, any types of problems or situations or anything related to the work, I can go to him and tell him, 'Hey, this is what's going on."

Both associates indicated that they feel the supervisor has a positive impact on their own behaviors and significantly influences the whole team.

Research question 2. The second research question was, "What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 2 had a Self-Awareness score of 94. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Capitalize On."

Associate 2A had two references during their interview that helped describe their perception of the impact the supervisor's self-awareness has on their daily performance. This associate stated that when his supervisor displays attributes such as being positive, a sense of humor, and self-confidence, that they feel the supervisor is there to work with them.

Associate 2B had six references during their interview that helped describe their perception of the impact that the supervisor's self-awareness has on their daily performance. Associate 2B discussed the supervisor's level of self-confidence in that the supervisor makes the associates feel like he knows what he is doing. Associate 2B states, the supervisor's positive attitude at work "is what gives associates the confidence to get the job done."



Research question 3. The third research question was, "What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 2 had a Self-Management score of 87. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 2A made eight references in regards to the impact his supervisor's self-management has on their own daily performance and stated that the supervisor "doesn't fly of the handle." Associate 2A went on further to state his tone and approach make the associates understand, "this is our job, and this is our business." Associate 2A further indicated that this helps the associate work more effectively with others.

Associate 2B made four references to the supervisor's self-management and how it impacts their own performance. Associate 2B stated that when they see professionalism and integrity from the supervisor, "It makes it a lot better for me. I know he wants to work with me and he is not just doing it because he is the supervisor."

Research question 4. The fourth research question was, "What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 2 had a Social Awareness score of 83. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 2A made seven references to the supervisor's social awareness and how it impacted his own performance. Associate 2A shared that the supervisor is a good listener and they often talk about family, children, and other things. Associate 2A further



stated that when they have these discussions that "these are the little things that help me get going and get the job done."

Associate 2B made 17 references to the supervisor's social awareness and how it impacted their own performance. Associate 2B stated that he likes when the supervisor clarifies expectations and gets all the workers on the same page. Associate 2B further discussed that due to the supervisor's previous work history that the associate feels the supervisor really listens, which gives associate 2B confidence that the supervisor will take care of their needs.

Research question 5. The fifth research question was, "What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 2 had an overall Relationship Management score of 93. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Capitalize On."

Associate 2A made 16 references to the supervisor's relationship management and how it impacted their own performance. Associate 2A made numerous statements such as, "He's motivating and positive with us. He can feel people out and know how to get the most out of them." Associate 2A also discussed how approachable supervisor 2 is and how it makes the associate want to work with him.

Associate 2B made 10 references to his supervisor's level of relationship management and how it impacts the associate when he sees it. Associate 2B stated he can tell the supervisor wants to listen and wants to be there. Associate 2B further stated



that when the associate sees this behavior it makes them feel that "if he takes care of us, we will take care of him."

Supervisor 3. Supervisor 3 was the first of two supervisors identified from a second distribution company in Los Angeles County. Table 12 summarizes the scores and themes from Supervisor 3's results of the Emotional Intelligence Appraisal®–Me Edition.

Table 12
Supervisor 3: Assessment Results

EI Domain	Score	Overall Classification ¹
Overall	85	A Strength To Build On
Self-Awareness	85	
Self-Management	87	
Social Awareness	83	
Relationship Management	85	

¹Determined by the Emotional Intelligence Appraisal®–Me Edition

Table 13 summarizes the themes and patterns identified during the semistructured interviews conducted with two associates that work with Supervisor 3.

Participant 3: Themes in Responses to Research Questions

Research Questions	Themes in Responses
1. How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?	 Makes them want to achieve more Helps make the company better Makes associates happy to see him engaged



Table 13

- 2. What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?
- Makes associates want to get the job done
- Issues are addressed faster
- Workload feels easier
- Day goes by faster
- 3. What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?
- Supervisor's mood is contagious
- Associates give more effort
- Makes the work feel easier
- 4. What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?
- Positive impact on effectiveness
- Keeps associates on track
- 5. What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?
- Associates work more efficiently
- Associates try harder
- Associates want to achieve more

Research question 1. The first research question was, "How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?"

Supervisor 3 had an overall EI score of 85. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 3A stated, in regards to what the impact of the supervisors EI is on the associates performance, "When I see he is in a good mood, it makes me feel ready to go." Associate 3A also stated that when the associates sees the supervisor displaying EI behaviors that "it makes me want to do better and achieve a little bit more."

According to associate 3B, when they see that the supervisor is upbeat and on the floor with them, then the associate's work is more likely to go smoothly and the associate is more likely to engage the supervisor.



Research question 2. The second research question was, "What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 3 had a Self-Awareness score of 94. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Capitalize On."

Associate 3A had four references during their interview that helped describe their perception of the impact the supervisor's self-awareness has on their daily performance.

This associate stated that when his supervisor displays attributes such as a sense of humor and being positive, "It ease's the workload so the day is not going to be a hard day."

Associate 3B had three references during their interview that helped describe their perception of the impact that their supervisor's self-awareness has on their daily performance. Associate 3B discussed that when they see the supervisor using his sense of humor that it makes the day go by faster making the associate feel more effective.

Associate 3B also said when they see the supervisor acting in a confident manner that it makes the associate more confident and effective.

Research question 3. The third research question was, "What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 3 had a Self-Management score of 87. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 3A made four references in regards to the impact the supervisor's selfmanagement has on their own daily performance and he stated that the supervisor



motivates everyone with a "Let's all work and let's get the job done. Let's get it done." Associate 3A continued and said that when they see that behavior, it makes the workflow seem easier.

Associate 3B made three references to the supervisor's self-management and how it impacts their own performance. Associate 3B stated that when they see self-management attributes like professionalism and self-control, then they feel "that I'm being led by someone who knows what they're doing, and makes you feel confident." Additionally Associate 3B said, when they see these behaviors, "I would work more efficiently, simply because he explains more, compared to barking it to me."

Research question 4. The fourth research question was, "What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 3 had a Social Awareness score of 83. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 3A made four references to the supervisor's social awareness and how it impacted their own performance. Associate 3A shared that when they see social awareness behaviors like active listening, they are more likely to be engaged in work. When they do not see these behaviors in the supervisors, then the associate feels, "it doesn't really show that they want to be here."

Associate 3B made two references to the supervisor's social awareness and how it impacted their own performance. Associate 3B stated that when the supervisor really listens to the associate, it has a positive impact on the associate's day and on the associate's effectiveness.



Research question 5. The fifth research question was, "What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 3 had an overall Relationship Management score of 85. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 3A made 13 references to the supervisor's relationship management and how it impacted their own performance. Associate 3A made numerous references to some attributes of relationship management such as receiving recognition from the supervisor—a pat on the back—and that it would give the associate a boost to be faster at work, but to not lose sight of doing things right. Associate 3A also discussed that the supervisor builds teamwork by collaborating with associates to make everyone look good, not just the supervisor.

Associate 3B made four references to the supervisor's level of relationship management and how it impacts the associate when they see it. Associate 3B stated when they see relationship management attributes like clarifying expectations that the associate would work more efficiently.

Supervisor 4. Supervisor 4 was the second supervisor identified from a second distribution company in Los Angeles County. Table 14 summarizes the scores and themes from Supervisor 4's results of the Emotional Intelligence Appraisal®–Me Edition.

Table 14

Supervisor 4: Assessment Results



EI Domain	Score	Overall Classification ¹
Overall	80	A Strength To Build On
Self-Awareness	72	
Self-Management	87	
Social Awareness	90	
Relationship Management	69	

¹ Determined by the Emotional Intelligence Appraisal®–Me Edition

Table 15 summarizes the themes and patterns identified during the semi-

structured interviews conducted with two associates that work with Supervisor 4.

Table 15

Participant 4: Themes in Responses to Research Questions

Research Questions	Themes in Responses
1. How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?	 Makes associates work more effectively Lifts morale Makes associates want to get the job done
2. What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?	Lightens the daySupervisors behavior is contagious
3. What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?	Helps operation run smoothlyAssociates work harder
4. What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?	No micromanagementThere is more trustThere is more listening
5. What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?	There is more partnershipThere is more communicationThere is more recognition

Research question 1. The first research question was, "How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?"

Supervisor 4 had an overall EI score of 80. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

According to associate 4A, in regards to when the associate sees the attributes of EI in the supervisor, such as clarifying expectations and social awareness, that it keeps everyone focused and aware of what needs to be done.

According to associate 4B, when the supervisor acts in a manner that boosts morale, such as being positive and interacting with associates, it makes associates more effective. Specifically associate 4B stated it makes the associate want to give more and "stand out from the crowd."

Research question 2. The second research question was, "What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 4 had a Self-Awareness score of 72. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "With a Little Improvement, This Could Be a Strength."

Associate 4A had six references during their interview that helped describe their perception of the impact the supervisor's self-awareness has on their daily performance. This associate stated that when the supervisor displays attributes such as a sense of humor and being positive, that it "kind of lightens the day. Makes you feel like, okay it's a good day." Associate 4A went on to say in regards to his supervisor displaying confidence that



"if he's confident, I want to be confident in everything he asks me, I want to have answers for him."

Associate 4B had three references during their interview that helped describe their perception of the impact that the supervisor's self-awareness has on their daily performance. Associate 4B discussed that the associate sees the supervisor displaying attributes of self-awareness, by ensuring he is not micromanaging the associates.

Associate 4B further stated, "I think he tries to run a smooth operation. He more or less knows he doesn't have to overlook what you're doing, question what you're doing, he lets you get your job done."

Research question 3. The third research question was, "What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 4 had a Self-Management score of 87. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 4A made seven references in regards to the impact the supervisor's self-management has on their own daily performance and stated, "If he has got a positive attitude he's probably going to be talking and communicating with the associates and making them feel good."

Associate 4B made 16 references to the supervisor's self-management and how it impacts their own performance. Associate 4B related that when the associate sees self-management attributes, like integrity and flexibility, that the associate is likely to work harder, stating, "It just makes me want to give a hundred and ten percent every day."



Research question 4. The fourth research question was, "What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 4 had a Social Awareness score of 90. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Capitalize On."

Associate 4A made five references to the supervisor's social awareness and how it impacted their own performance. In regards to the supervisor's attributes of social awareness, such as being an active listener, associate 4A states, "The ones I work with every day, on a day-to-day, they listen." Associate 4A further stated, "If you're listening and you don't cut me off, it makes me feel like you're paying attention."

Associate 4B made eight references to the supervisor's social awareness and how it impacted their own performance. Associate 4B stated that when supervisors show that they can read an audience and know how to treat them, it helps everyone's effectiveness. Associate 4B states, "How they ask for something to be done can change the demeanor of a whole group. You're not going to get happy workers. You're not going to get their productivity."

Research question 5. The fifth research question was, "What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 4 had an overall Relationship Management score of 69. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "Something You Should Work On."



Associate 4A made 13 references to the supervisor's relationship management and how it impacted their own performance. Associate 4A made numerous references to some attributes of relationship management, such as cultivating relationships and inspiring teamwork, stating that often the supervisor is right next to the associate working and sometimes even doing things himself. Associate 4A further discussed how the supervisors builds team work by often giving "pep" talks, stating, "Those little pep talks like that can get to somebody or make them feel better."

Associate 4B made 16 references to his supervisor's level of relationship management and how it impacts the associate. Associate 4B stated that what has the most impact on the associate is seeing the supervisors recognizing the work the associate and others do. Associate 4B further stated that the recognition "makes you feel appreciated. Makes you feel good with yourself."

Supervisor 5. Supervisor 5 was the only supervisor identified from a distribution company in Riverside County. Table 16 summarizes the scores and themes from Supervisor 5's results of the Emotional Intelligence Appraisal®–Me Edition.

Table 16
Supervisor 5: Assessment Results

EI Domain	Score	Overall Classification ¹
Overall	87	A Strength To Build On
Self-Awareness	91	
Self-Management	87	
Social Awareness	80	
Relationship Management	89	

Determined by the Emotional Intelligence Appraisal®–Me Edition

Table 17 summarizes the themes and patterns identified during the semistructured interviews conducted with two associates that work with Supervisor 5.



Table 17

Participant 5: Themes in Responses to Research Questions

Research Questions	Themes in Responses
1. How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?	 Supervisor's attitude is contagious Associates are motivated Associates feel more productive
2. What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?	 Increases the associates level of confidence Builds camaraderie Increases motivation
3. What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?	 Builds teamwork Makes associate want to work harder Associates emulate his behavior
4. What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?	 Helps with teamwork Relieves stress Associates can more easily voice concerns
5. What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?	 Supervisors are approachable Associates try to emulate supervisor's behavior

Research question 1. The first research question was, "How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?"

Supervisor 5 had an overall EI score of 87. According to the Emotional

Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."



According to associate 5A, in regards to when the supervisor displays attributes of EI, it causes them to try to emulate the supervisor's behaviors because of the calming effect it has. Associate 5A stated, "If they have a calming experience [sic], then I can ... I have to try to learn to be like my supervisors, calming."

According to associate 5B, when the supervisor displays attributes of EI, it provides a motivating effect. Associate 5B stated, "Well it gets me pumped up, too. 'It's like yo [sic], cool. My boss is ready to work. I'm ready to work. Let's get this day over with."

Research question 2. The second research question was, "What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 5 had a Self-Awareness score of 91. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Capitalize On."

Associate 5A had two references during their interview that helped describe their perception of the impact self-awareness has on their daily performance. This associate stated that when the supervisor displays attributes such as a self-confidence, that it increases the associate's level of motivation in regards to getting the work done.

Associate 5B had four references during their interview that helped describe their perception of the impact that the supervisor's self-awareness has on their daily performance. Associate 5B discussed seeing the supervisor displaying attributes of self-awareness such as being conscientious and confident. According to associate 5B, "If my supervisor is confident in what they're doing, then it makes me feel more confident."



Research question 3. The third research question was, "What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 5 had a Self-Management score of 87. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 5A made four references in regards to the impact the supervisor's self-management has on their own daily performance and stated when the associate sees those behaviors, "It motivates me to get the work done and to prepare for the job."

Associate 5B made nine references to their supervisor's self-management and how it impacts their own performance. Associate 5B stated when seeing a positive attitude coming from the supervisors, "It makes me feel more productive because then I feel like, 'Wow! We're on the same page.' I'm positive. They're positive. It allows me to be positive with my co-workers and transcend that emotion back to them. If we're all positive, then, we all work. We're always having a good time together."

Research question 4. The fourth research question was, "What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 5 had a Social Awareness score of 80. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 5A made five references to the supervisor's social awareness and how it impacted their own performance. Associate 5A stated that when supervisors show that they can read an audience and know how to treat them, it helps everyone's effectiveness.



Associate 5A stated, "If a supervisor knows what's going on I can sense maybe that he can fix the issue."

Associate 5B made five references to the supervisor's social awareness and how it impacted their own performance. In regards to the supervisors attributes of social awareness, such as being an active listener and anticipating other's needs, the associate stated, "If I'm having problems, I can go to them and they can find the answer for me."

Research question 5. The fifth research question was, "What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 5 had an overall Relationship Management score of 89. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 5A made 11 references to his supervisor's relationship management and how it impacted their own performance. Associate 5A made numerous references to some attributes of relationship management, such as cultivating relationships and influencing others, stating that "I know that I can express whatever my concern or whatever my issue is, and that I can get a resolution. It just gives me that relief that I am able to speak up and voice my concerns."

Associate 5B made eight references to the supervisor's level of relationship management and how it impacts them when they see it. The associate stated that what has the most impact is when they see the supervisors building relationships, "They're not stepping over into unchartered territories. They're staying within the guidelines of not to offend people."



Supervisor 6. Supervisor 6 was the first of two supervisors identified from a distribution company in San Bernardino County. Table 18 summarizes the scores and themes from Supervisor 6's results of the Emotional Intelligence Appraisal®–Me Edition Table 18

Supervisor 6: Assessment Results

EI Domain	Score	Overall Classification ¹
Overall	87	A Strength To Build On
Self-Awareness	91	
Self-Management	87	
Social Awareness	80	
Relationship Management	89	

¹ Determined by the Emotional Intelligence Appraisal®–Me Edition

Table 19 summarizes the themes and patterns identified during the semistructured interviews conducted with two associates that work with Supervisor 6.

Table 19
Participant 6: Themes in Responses to Research Questions

Research Questions	Themes in Responses
1. How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?	 Very little impact Encouraging Makes me feel more positive
2. What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?	Builds camaraderieIncreases motivationBehavior is contagious
3. What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?	More positive interactionsBehavior is contagiousIssues are addressed faster

- 4. What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?
- 5. What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?
- Supervisors are more approachable
- There is no favoritism
- Needs are addressed.
- They have positive attitudes
- No micromanagement

Research question 1. The first research question was, "How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?"

Supervisor 6 had an overall EI score of 85. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

According to associate 6A, in regards to when the supervisor displays attributes of EI it has little to no impact on the associate's performance. Associate 6A stated, "We already know what we have to do. As long we keep doing what we're doing, they're okay with it."

According to associate 6B, when the supervisor displays attributes of EI it provides an encouraging effect stating, "It makes me feel better at work."

Research question 2. The second research question was, "What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 6 had a Self-Awareness score of 82. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."



Associate 6A had three references during their interview that helped describe their perception of the impact self-awareness has on their daily performance. This associate stated that when their supervisor displays attributes such as a self-confidence, that it increases his own level of motivation in regards to getting the work done and causes the associate to seek out the supervisor more knowing he may have answers for issues.

Associate 6B had four references during their interview that helped describe their perception of the impact that self-awareness of the supervisor has on their daily performance. Associate 6B discussed that he sees his supervisor displaying attributes of self-awareness, such as being confident, and it makes the associate work harder. The associate stated, "It makes me work better and try to be like him. He has confidence and everything, he knows what he's doing so I work better. I know that I'm under good leadership [sic]."

Research question 3. The third research question was, "What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 6 had a Self-Management score of 87. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 6A made three references in regards to the impact the supervisor's selfmanagement has on the associate's own daily performance and discussed preferring to work with supervisors that is not "telling you off," or "taking their anger out on you."

Associate 6B made ten references to their supervisor's self-management and how it impacts their own performance. Associate 6B stated when seeing a supervisor exercise



self-control, the associate feels more comfortable addressing issues with them. Associate 6B stated, "If they have self-control then it's better for me to bring things up to them."

Research question 4. The fourth research question was, "What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 6 had a Social Awareness score of 83. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 6A made four references to his supervisor's social awareness and how it impacted his own performance. Associate 6A stated that when supervisors show that they can anticipate the associate's needs "it's better because they're listening to your needs and you don't have to be constantly reminded them and telling them over and over and over [sic] again that I need this and I need that."

Associate 6B made three references to the supervisor's social awareness and how it impacted their own performance. In regards to his supervisor's attributes of social awareness, such as being an active listener, the associated stated, "If I have a problem with an order or something, it makes me feel better to go and ask them about it."

Research question 5. The fifth research question was, "What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 6 had an overall Relationship Management score of 87. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On".



Associate 6A made five references to the supervisor's relationship management and how it impacted the associate's performance. Associate 6A made numerous references to some attributes of relationship management, such as cultivating relationships, discussing how that the supervisor displays trust in the associates and does not micromanage them.

Associate 6B made five references to the supervisor's level of relationship management and how it impacts them when they see it. The associate stated that what has the most impact is when they see the supervisors building relationships and trusting the associate to do certain tasks. The associate stated, "I mean, to me, it makes me feel better working for the supervisor when he asks me, 'Hey, can you do this real quick? I need your help.' Then I feel, I got it and I'll go do it."

Supervisor 7. Supervisor 7 was the second supervisor identified from a distribution company in San Bernardino County. Table 20 summarizes the scores and themes from Supervisor 7's results of the Emotional Intelligence Appraisal®–Me Edition.

Table 20
Supervisor 7: Assessment Results

EI Domain	Score	Overall Classification ¹
Overall	84	A Strength To Build On
Self-Awareness	82	
Self-Management	85	
Social Awareness	74	
Relationship Management	93	

Determined by the Emotional Intelligence Appraisal®–Me Edition

Table 21 summarizes the themes and patterns identified during the semistructured interviews conducted with two associates that work with Supervisor 7.



Table 21

Participant 7: Themes in Responses to Research Questions

Research Questions	Themes in Responses
1. How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?	EncouragingIncrease work performance
2. What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?	EncouragingIncreases confidenceBehavior is contagious
3. What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?	More positive interactionsIncreases work performance
4. What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?	Supervisors are more approachableIncreases associates confidenceIssues are addressed
5. What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?	 Behavior is contagious They have positive attitudes More positive interactions with associates

Research question 1. The first research question was, "How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?"

Supervisor 7 had an overall EI score of 84. According to the Emotional

Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."



According to associate 7A, in regards to when the supervisor displays attributes of EI, it increases the associate's performance stating, "It makes me work, it makes me work even better."

According to associate 7B, when the supervisor displays attributes of EI it provides a stabilizing effect on the associate's behavior stating, "I'm sort of a type A personality, and I have been known to just get excited, and through him, I'm learning to control the highs and the lows."

Research question 2. The second research question was, "What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 7 had a Self-Awareness score of 82. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 7A had four references during their interview that helped describe their perception of the impact self-awareness has on their daily performance. This associate stated that when their supervisor displays attributes such as self-confidence, that the associate is more likely to approach the supervisor to address issues.

Associate 7B had seven references during their interview that helped describe their perception of the impact that the supervisor's self-awareness has on their daily performance. Associate 7B discussed that he sees his supervisor displaying attributes of self-awareness, such as being self-examining, and it makes the associate work harder. The associate stated that when supervisors have an attitude of "Hey, I messed this up, my integrity tells me to own up to this, and this is my mistake" then the associate feels more confident working for the supervisor.



Research question 3. The third research question was, "What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 7 had a Self-Management score of 85. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 7A made 14 references in regards to the impact the supervisor's self-management has on the associate's own daily performance. Associate 7A discussed preferring to work with supervisors that display those attributes, stating it makes the associate feel glad to work for them and makes the associate want to work harder.

Associate 7B made seven references to their supervisor's self-management and how it impacts their own performance. Associate 7B stated when seeing a supervisor being positive it keeps them working at 100%, and if the supervisor were not positive then the associate's productivity would be less than 100%.

Research question 4. The fourth research question was, "What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 7 had a Social Awareness score of 74. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "With a Little Improvement, This Could Be a Strength."

Associate 7A made three references to his supervisor's social awareness and how it impacted his own performance. Associate 7A stated that when supervisors show that they are listening, the associate is more willing to address issues stating, "No matter what



you go to him with, no matter what kind of problem you're having, if you go to him and explain everything to him, he's going to see to it."

Associate 7B made three references to the supervisor's social awareness and how it impacted their own performance. In regards to the supervisor's attributes of social awareness, Associate 7B stated that the supervisor understands the group and listens to them, because the supervisor provides relevant feedback when the associates are struggling with work related issues.

Research question 5. The fifth research question was, "What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 7 had an overall Relationship Management score of 93. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Capitalize On."

Associate 7A made 14 references to the supervisor's level of relationship management and how it impacts them when they see it. The associate stated that what has the most impact is when they see the supervisors building relationships with the associates. Associate 7A stated, "It makes feel better about myself and makes me work even harder, because I know he's just showed me that he believed in me."

Associate 7B made two references to the supervisor's relationship management and how it impacted the associate's performance. Associate 7B made numerous references to some attributes of relationship management, such as cultivating relationships and showing empathy, stating, "okay, if I make a mistake he's going to see



it for what it is, and help give solutions." The associate further stated that this behavior makes them want to give 100% of their efforts.

Supervisor 8. Supervisor 8 was the only supervisor identified from a second distribution company in San Bernardino County. Table 22 summarizes the scores and themes from Supervisor 8's results of the Emotional Intelligence Appraisal®–Me Edition.

Table 22
Supervisor 8: Assessment Results

EI Domain	Score	Overall Classification ¹
Overall	73	With a Little Improvement, This
Self-Awareness	72	Could be a Strength
Self-Management	79	
Social Awareness	70	
Relationship Management	69	

Determined by the Emotional Intelligence Appraisal®–Me Edition

Table 23 summarizes the themes and patterns identified during the semistructured interviews conducted with two associates that work with Supervisor 8.

Table 23
Participant 8: Themes in Responses to Research Questions

Research Questions	Themes in Responses
1. How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?	 Makes associates happy Increase work performance



- 2. What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?
- Encourages performance
- Increases confidence
- Inspires teamwork
- 3. What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?
- Increases work performance
- Increases effectiveness
- 4. What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?
- Increases associate effectiveness
- Issues are addressed
- 5. What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?
- Behavior is helpful

Research question 1. The first research question was, "How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?"

Supervisor 8 had an overall EI score of 73. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "With A Little Improvement, This Could Be a Strength."

According to associate 8A, in regards to when the supervisor displays attributes of EI, it increases the associate's performance stating that the supervisor is, "easy to talk to" and, "if I need something, I know who to go for [sic], because he'll always help me out."

According to associate 8B, when the supervisor displays attributes of EI, it makes the associate happy and more productive.



Research question 2. The second research question was, "What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 8 had a Self-Awareness score of 72. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "With A Little Improvement, This Could Be a Strength."

Associate 8A had one reference during their interview that helped describe their perception of the impact self-awareness has on their daily performance. This associate discussed that when his supervisor displays attributes such as an appropriate sense of humor, that the associate becomes more productive. The associate further stated, "That's a positive attitude. He's a good-natured person."

Associate 8B had three references during their interview that helped describe their perception of the impact that self-awareness of the supervisor has on their daily performance. Associate 8B stated that when the supervisor comes to work in a positive mood, it makes the associates happy and more productive.

Research question 3. The third research question was, "What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 8 had a Self-Management score of 79. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "With A Little Improvement, This Could Be a Strength."

Associate 8A made 11 references in regards to the impact the supervisor's selfmanagement has on the associate's own daily performance. Associate 8A stated he is



more productive because his supervisor practices self-management behaviors stating, "He keeps his cool. He's got control."

Associate 8B made two references to their supervisor's self-management and how it impacts their own performance. Associate 8B stated when seeing a supervisor being positive, it lifts the associates morale and the associate feels more productive.

Research question 4. The fourth research question was, "What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 8 had a Social Awareness score of 70. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "With a Little Improvement, This Could Be a Strength."

Associate 8A made three references to his supervisor's social awareness and how it impacted his own performance. Associate 8A stated that when supervisors show that they are listening it makes them more productive. Associate 8A further stated, "If I need something, I know who to go for because he'll always help me out."

Associate 8B made one reference to the supervisor's social awareness and how it impacted their own performance. Associate 8B discussed that when the supervisor listens to the associates, it helps the associate work more productively.

Research question 5. The fifth research question was, "What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?"



Supervisor 8 had an overall Relationship Management score of 69. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "Something You Should Work On."

Associate 8A made two references to the supervisor's level of relationship management and how it impacts them when they see it. The associate stated that when the supervisor shows empathy, it is somewhat helpful and adds to the associate's productivity.

Associate 8B made four references to the supervisor's relationship management and how it impacted the associate's performance. Associate 8B made numerous references to some attributes of relationship management, such as inspiring teamwork, stating that when he promotes teamwork it helps associate 8B increase their own productivity.

Supervisor 9. Supervisor 9 was the only supervisor identified from a third distribution company in Los Angeles County. Table 24 summarizes the scores and themes from Supervisor 9's results of the Emotional Intelligence Appraisal®–Me Edition.

Table 24
Supervisor 9: Assessment Results

EI Domain	Score	Overall Classification ¹
Overall	90	A Strength to Capitalize on
Self-Awareness	82	
Self-Management	91	
Social Awareness	95	
Relationship Management	93	

¹ Determined by the Emotional Intelligence Appraisal®–Me Edition



Table 25 summarizes the themes and patterns identified during the semistructured interviews conducted with two associates that work with Supervisor 9.

Table 25

Participant 9: Themes in Responses to Research Questions

Research Questions	Themes in Responses
1. How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?	 Clarifies expectations Associates look forward to coming to work Makes the day seem easier
2. What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?	 Is Conscientious Above average performance
3. What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?	Above average performanceIncreases effectiveness
4. What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?	Increases associate effectivenessIssues are addressedInspires teamwork
5. What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?	Good distribution of workAssociates feel valued

Research question 1. The first research question was, "How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?"



Supervisor 9 had an overall EI score of 90. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Capitalize On."

According to associate 9A, in regards to when the supervisor displays attributes of EI it increases the associate's performance. Associate 9A stated, "He puts his foot down. That keeps me on my toes."

According to associate 9B, when the supervisor displays attributes of EI it makes the associate more productive at work and happier at work. Associate 9B stated, "He actually does everything that I'm expecting when I come to work. The greeting, and walking with me and everything. He's actually a really good supervisor."

Research question 2. The second research question was, "What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?"

Supervisor 9 had a Self-Awareness score of 82. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Build On."

Associate 9A had four references during their interview that helped describe their perception of the impact self-awareness has on their daily performance. Associate 9A discussed that when their supervisor displays attributes such as being conscientious they feels more engaged and more productive. Associate 9A stated that after sharing a personal issue with the supervisor the supervisor responded, "Don't worry about it. Get better and come back."

Associate 9B also had four references during their interview that helped describe their perception of the impact that self-awareness of the supervisor has on their daily



performance. Associate 9B stated that when the supervisor comes to work and is on the floor in a positive mood, it makes the associate more productive. Associate 9B stated, "I am more effective, I accomplish things more. I do a lot more than I normally do it because he's out there."

Research question 3. The third research question was, "What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 9 had a Self-Management score of 91. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Capitalize On."

Associate 9A made 15 references in regards to the impact the supervisor's self-management has on the associate's own daily performance. Associate 9A explained that they are more productive because their supervisor practices self-management behaviors stating, "It makes me want to come every day."

Associate 9B made 12 references to their supervisor's self-management and how it impacts their own performance. Associate 9B stated when seeing a supervisor showing self-control or being positive, it makes the associate happy and more productive.

Associate 9B stated, "It just makes me want to show him that I can do it, give it a 120% and I'm more than above average."

Research question 4. The fourth research question was, "What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?"



Supervisor 9 had a Social Awareness score of 95. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Capitalize On."

Associate 9A made nine references to the supervisor's social awareness and how it impacted their own performance. Associate 9A discussed that when the supervisor understands the dynamics of the group it increase everyone's performance. He further related that when the supervisor says, "I'm going to put you here because of this reason." It gives associate 9A a boost in performance.

Associate 9B made five references to the supervisor's social awareness and how it impacted their own performance. Associate 9B discussed that when there is an issue that needs to be addressed, the supervisor practices active listening behaviors which causes the associate to be more effective. Associate 9B stated, "He actually pays attention to you. You think that they don't, or whether he does or not [sic], he actually does. That's what gets me through."

Research question 5. The fifth research question was, "What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?"

Supervisor 9 had an overall Relationship Management score of 93. According to the Emotional Intelligence Appraisal®–Me Edition this score is classified as, "A Strength to Capitalize On."

Associate 9A made 19 references to the supervisor's level of relationship management and how it impacts them when they see it. The associate stated that when the supervisor inspires teamwork and cultivates relationship, it is a boost to his



productivity. Associate 9A further stated, "The good thing about it is that he likes to associate, to know that if I put you guys somewhere, it's because I know you guys can excel there."

Associate 9B made 26 references to the supervisor's relationship management and how it impacted the associate's performance. Associate 9B made numerous references to some attributes of relationship management, such as inspiring teamwork and giving recognition, stating he feels more effective when he hears, "Hey, you're doing a good job. You're really making an effect on our company. And he keeps telling you all this [sic], it really seems like you're doing a good job and you're helpful to the team. That makes you just want to come every day."

Data Analysis per Themes in Research Questions

In this section, participant data was analyzed and reported according to the five research questions. Once the data was analyzed per individual supervisor and the associates that work with that supervisor, the data was then analyzed by research question in order to further identify themes and perceptions. Each group of themes derived from the analysis of data per supervisor was grouped together with all nine sets of data in order to identify collective themes in response to each research question.

Research Question 1. The first research question was, "How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?"

The 18 associate's responses were analyzed for common themes and patterns.

Table 26 represents the common themes for research question 1.



Table 26

Research Question 1: Common Themes and Patterns in Responses

Research Question	Common Theme	Number of Respondents Indicating Theme
How do warehouse associates describe the impact of their immediate	A. Morale increases and associates feel valued	14
supervisor's overall emotional intelligence on their daily performance within a distribution center?	B. Increases associate productivity	8

Common theme A: Increases morale. Fourteen of the eighteen associates surveyed felt their supervisor's overall behavior and attitude has a significant impact on their morale and makes them feel valued. Associates discussed the importance of morale and how quickly it can be impacted by the supervisor's behaviors. Associates claimed that they can tell how effective they will be during the day based off of their initial interaction with the supervisor. Numerous associates stated that they look forward to interacting with the supervisor when they know they will be in a positive mood, they will clarify expectations for the associates, and they will inspire teamwork. Many associates felt that when the supervisor displays these behaviors they will be able to achieve the expected level of productivity that day and often they achieve more.

Common theme B: Increases associate productivity. Eight of the eighteen associates responded that when supervisors display the attributes and behaviors of EI that they can sense their productivity is higher. These associates discussed that when working with the supervisor their workload seems easier and they are likely to overachieve their



productivity goal for the day. Associates also discussed that the supervisors, when displaying attributes of EI, have a significant impact on teamwork, which in turn impacts the associates productivity. Associate 5B stated when the supervisor displays attributes of EI, such as being positive "it makes me feel more productive because then I feel like, 'Wow! We're on the same page.' I'm positive. They're positive. If we're all positive, then, we all work. We're always having a good time together."

Of the eighteen associates who were surveyed, seventeen responded that the supervisors' behavior has some impact on their productivity to where they will either hit their productivity goals or surpass them. Many associates stated that the first interaction with their supervisor sets the tone for their productivity for the rest of the shift.

Table 27 represents the common themes for research question 2.

Table 27

Research Question 2: Common Themes and Patterns in Responses

Research Question	Common Theme	Number of Respondents Indicating Theme
What is the impact of a supervisor's self- awareness level on the daily performance of warehouse associates within a distribution center?	 A. Builds and encourages confidence B. Issues and obstacles are addressed faster C. Increases performance D. Inspires teamwork 	9 6 5 6

Research Question 2. The second research question was, "What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?"

Common theme A: Builds and encourages confidence. Nine of the eighteen associates discussed the impact their supervisor's level of self-confidence, an attribute of



self-awareness, has on their performance. Associates discussed that when the supervisor is confident in the work to be done, the associates feel more confident in their own abilities to accomplish the work. They also discussed that the supervisors' confidence causes the associates to be more likely to raise issues and concerns to the supervisor. This allowed issues to be addressed quicker, allowing the associates to quickly get back to being productive again, increasing the confidence in their own abilities to recognize issues and address them. Associate 5B stated, "If my supervisor is confident in what they're doing, then it makes me feel more confident. If I'm having problems, I can go to them and they can find the answer for me."

Common theme B: Issues and obstacles are addressed faster. Six of eighteen associates discussed that when the supervisor is confident in his abilities, they are more likely to bring issues and obstacles to the supervisors directly. According to the associates, this causes issues to not be ignored and instead be quickly addressed and put behind them. Associate 7B stated that, "If he's confident, then I can go and bring up a situation he would be able to fix or work with it and that allows us to get it done so that the overall flow of the task can get done."

Common theme C: Increases performance. Those supervisors who were identified by associates as having a positive attitude and practice self-awareness behaviors have a positive impact on the productivity of the associates. Five of the eighteen associates interviewed discussed how the self-awareness practices of the supervisor, such as displaying an appropriate sense of humor, could cause associates to increase their own performance. Associate 4B stated it "kind of lightens the day. Makes



you feel like, okay it's a good day." This causes associates, according to associate 4B, to try and surpass their daily performance requirements.

Common theme D: Inspires teamwork. Six of the eighteen associates discussed how the supervisor's conscientious behavior, an attribute of the EI domain of self-awareness, inspires teamwork amongst the associates that work for that supervisor. This teamwork, according to the associates, can lead to greater productivity.

Table 28 represents the common themes for research question 3.

Table 28

Research Question 3: Common Themes and Patterns in Responses

Research Question	Common Theme	Number of Respondents Indicating Theme
What is the impact of a supervisor's self-	A. Associates voluntarily increase performance	9
management level on the daily performance of warehouse	B. Operation runs more effectively	4
associates within a distribution center?	C. Interactions with supervisors are more positive and influence teamwork	5

Research Question 3. The third research question was, "What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?"

Common theme A: Associates voluntarily increase performance. Nine of the eighteen associates felt that the supervisor's self-management behaviors had a positive impact on the associate's performance. These associates stated that when the supervisor has a positive attitude, then the associates are more likely to reach their performance goals. Associate 3B stated when seeing self-management behaviors, "It makes me



respect the supervisor even more so if you're going to ask me to do something, then I'll try my hardest to do it efficiently. If I don't respect you, I'm going to take my time."

Common theme B: Operation runs more effectively. Four of the eighteen associates discussed the behaviors of self-management and attributes such as being flexible in the work place. Associates discussed that when a supervisor is flexible, then associates are more confident and therefore more productive knowing that the supervisor can address numerous issues at the same time. Associate 4B stated when seeing a supervisor being flexible that the supervisor "probably improvises when we have somebody that calls out and we are now short a man. He'll make his moves and adjustments so we'll still have a smooth operation."

Common theme C: Interactions with supervisors are more positive and influence teamwork. Five of the eighteen associates discussed that when supervisors show attributes of self-management, the interactions between associate and supervisor are more effective. Associate 7A stated, "It makes me work, it makes me work even better."

Table 29 represents the common themes for research question 4.

Table 29

Research Question 4: Common Themes and Patterns in Responses

Research Question	Common Theme	Number of Respondents Indicating Theme
What is the impact of a supervisor's social awareness level on the	A. Supervisors anticipate associate needs more effectively	10
daily performance of warehouse associates within a distribution center?	B. Supervisor understands group dynamics	11



Research Question 4. The fourth research question was, "What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?"

Common theme A: Supervisors anticipate associate needs more effectively. Ten of the eighteen associates discussed the impact social-awareness has on the associate and referred to the supervisor's ability to anticipate and address the needs of the associates. Associates discussed that during the assignment of duties for the day that when the supervisor recognizes pending obstacles and addresses them, then the associate can spend less time discussing issues and more time being productive. Associate 6A stated, "It makes you feel better about your work knowing that you got somebody that if I run into something sticky, he's going to be there to help me out."

Common theme B: Supervisor understands group dynamics. Eleven of the eighteen associates discussed the impact of understanding group dynamics, an attribute of social awareness, and its impact on their performance. Associates discussed the feeling of relief they get from knowing that the supervisors understand the abilities of each team member and that the supervisors do not play favorites or unfairly give preferential work to favored associates. Associate 9A stated, "There's no discrimination or favoritism going around. He puts it out there [sic]. I'm going to put you here because of this reason. I'll put you there because of this reason. It gives you a little boost."

Table 30 represents the common themes for research question 5.



Table 30

Research Question 5: Common Themes and Patterns in Responses

Research Question	Common Theme	Number of Respondents Indicating Theme
What is the impact of a supervisor's relationship	A. More recognition and relationship building	9
management level on the daily performance of warehouse	B. Supervisor leads more through influence	8
associates within a distribution center?	C. Morale increases and associates feel valued	5

Research Question 5. The fifth research question was, "What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?"

Common theme A: More recognition and relationship building. All eighteen associates discussed the positive impact the attributes of relationship management have on their daily performance. Specifically nine associates discussed the impact of the supervisor focusing on recognition and relationship building, and the positive impact those attributes can have on performance. Associate 7A stated, "It makes feel better about myself and makes me work even harder, because I know he's just showed me that he believed in me."

Common theme B: Supervisor leads more through influence. Eight of the eighteen associates discussed how the supervisor's ability to influence others impacted their own performance. All eight associates discussed their preference for a supervisor that explains issues to them rather than "barking" orders. These associates felt more



valued and part of a team when supervisors used influence rather than position or title to get the associates to perform. Associate 4A stated, "He's got a positive attitude he's probably going to be talking and communicating with the associates and making them feel good." He further related that this type of interaction makes everyone feel like they are part of a team.

Common Themes across Research Questions

In this section, the researcher reviewed the themes found in the data analysis per research question and the associate data gathered during the semi-structured interviews in order to identify which themes were common across multiple research questions.

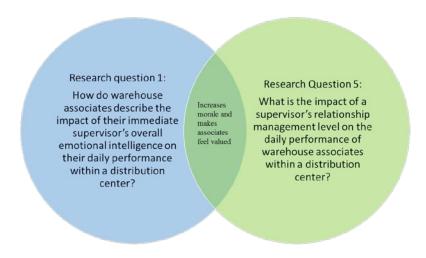


Figure 2. Common Themes Research Questions 1 & 5

Common Theme Overlap 1: Increased morale and associates feel valued. As shown in figure 3, the responses collected from the associates during the semi structured interviews produced data that is common to both research questions 1 & 5. The first research question, "How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?" produced themes indicating that associates morale is impacted based



on the emotionally intelligent behaviors displayed by their supervisors. Fourteen of eighteen respondents indicated their morale is positively impacted and they feel valued when they see their supervisors displaying emotionally intelligent behaviors. The fifth research question, "What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?" produced similar themes and five of the eighteen associates discussed their increased morale and feeling valued when working with a supervisors that display behaviors associated with relationship management.

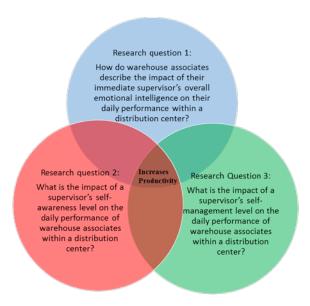


Figure 3. Common Themes Research Questions 1, 2, & 3

Common Theme Overlap 2: Increased productivity. Figure 4 shows the responses collected from the associates during the semi structured interviews produced data that is common to research questions 1, 2 & 3. The first research question, "How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?" produced themes indicating that associates productivity is increased impacted based on the



emotionally intelligent behaviors displayed by their supervisors. Eight of eighteen respondents indicated their productivity increases when their supervisors display emotionally intelligent behaviors. The second research question, "What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?" produced similar themes and five of the eighteen associates discussed their productivity increasing when working with a supervisors that display behaviors associated with self-awareness. Finally, the third research question, "What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?", produced similar themes and nine of the eighteen associates discussed that they voluntarily increase their performance when working with supervisors that display attributes of self-management.

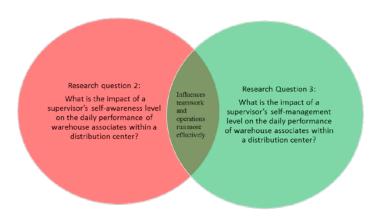


Figure 4. Common Themes Research Questions 2 & 3

Common Theme Overlap 3: Influences teamwork and operations run more effectively. Figure 4 shows the responses collected from the associates during the semi structured interviews produced data that is common to research questions 2 & 3. The second research question, "What is the impact of a supervisor's self-awareness level on



the daily performance of warehouse associates within a distribution center?", produced themes from six associates indicating operations run more effectively when obstacles to productivity are identified and addressed and that teamwork is enhanced amongst associates working with a supervisor that displays behaviors associated with self-awareness. The third research question, "What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?" produced similar themes and nine of the eighteen associates discussed that they either see operations running more effectively or that they see teamwork being enhanced when working with supervisors that display attributes of self-management.

Summary

This chapter described the results of the qualitative study using both an EI assessment and semi-structured interviews. The research questions were developed to describe how associates in a distribution environment perceive the impact their supervisor's self-awareness, self-management, social awareness, and relationship management behaviors have on their daily performance.

All eighteen associates interviewed described the four EI components within this study as having some level of positive impact on their daily performance when displayed by their supervisor. All eighteen participants specifically identified the relationship management attributes of providing recognition and relationship building as having a significant impact on their daily performance and as a result increased their productivity.

Nine supervisors and eighteen associates from six different food distribution companies within three counties either took an EI assessment or were interviewed in person to determine the impact the supervisors EI has on the daily performance of the



associates. Although only seven of the nine participating supervisors overall EI scores were classified as A Strength to Build or better by the Emotional Intelligence

Appraisal®—Me Edition, all nine supervisors displayed some specific attributes of EI that associates described as having a positive impact on their daily performance.



CHAPTER V: SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

This final chapter begins with a summary of the study, which restates the purpose, research questions, methodology, population, and sample. It identifies key findings from the study and the conclusions drawn from those findings as they relate to the research questions. Also outlined in this chapter are implications for action and recommendations for further research surrounding this topic. The chapter ends with final comments from the researcher.

Purpose Statement

The purpose of this qualitative study was to explore and describe the impact of a supervisor's Emotional Intelligence on the productivity of the associates that work for them within a distribution environment. The research design of this study includes identifying supervisors with high levels of EI through the administration of the Emotional Intelligence Appraisal®—Me Edition and included gathering of data, through semi-structured interviews, in regards to the impact that EI has on the associates performance that work for them.

Research Questions

This study was designed to answer the following research questions:

1. How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?



- 2. What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?
- 3. What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?
- 4. What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?
- 5. What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?

Methods

Through the use of a qualitative, multiple case study approach (Creswell et al., 2003), this study examined the link between a supervisor's emotional intelligence and the impact it has on their direct reports' productivity as described by the associates through semi-structured interviews.

This qualitative study utilized the Emotional Intelligence Appraisal®–Me Edition in order to identify the levels of EI possessed by supervisors who have been identified by executives as effective. Additionally, this study utilized semi-structured interviews consisting of four open-ended questions that elicited answers to the five research questions. Open-ended interview questions are common in qualitative research because they allow the participants to freely express their ideas and perceptions without influence from the interviewer (Doody & Noonan, 2013). The nine supervisors were sent an invitation to take the EI assessment via email and all supervisors took the assessment within 72 hours of receiving the invitation. Results from the EI assessment were used to



help understand the relationship between associates' responses during the interviews and the behaviors of their supervisors.

The interviews conducted with the associates were recorded, and each transcript was reviewed for accuracy and completeness of thought and meaning.

After conducting the interviews, the researcher utilized NVivo software to assist in the categorizing and coding the data by identifying key themes and patterns in the individual interviews. The researcher analyzed the associate's responses individually and then collectively for common themes to determine the associate's perceptions of the impact of their supervisor's level of EI.

Population and Sample

The target population is the group of elements, which conform to specific criteria, for which the researcher intends to use to generalize the results of the study (MacMillan & Schumacher, 2010). The target population for this study was supervisors within the distribution industry. The manner in which units of study are selected and describing the participants is important in interpreting the results and in making generalizations of findings (MacMillan & Schumacher, 2010). Once the target population was defined, the researcher, through the use of data collected through the Bureau of Labor and Statistics (BLS) identified the sample frame of supervisors. This data showed that in California there are approximately 4,508 supervisors within the distribution industry ("Distribution," 2012).

Sample. Convenience, purposeful sampling was used to create a subgroup based on location and convenience (Vogt, 2005). McMillan and Schumacher (2010), state that within convenience sampling, "...the researcher uses subjects who happen to be



accessible or who may represent certain types of characteristics" (p. 136). Food distribution companies located in Southern California were solicited for participation in the study.

The sampling frame used for this study was 51 supervisors within a food distribution environment in Southern California. With an average span of control of 18 direct reports, this group supervises approximately 918 warehouse associates.

Patten (2012) states that purposive sampling is used when individuals or groups are selected who are believed to be good sources of information. Key executives from thirteen potential food distribution companies were contacted via email in order to solicit their participation. Of the thirteen companies solicited, six executives responded and agreed to have their organization participate. These key executives were asked to identify one or two supervisors within their organization that they felt led highly productive teams of warehouse associates along with two associates that work with each of the supervisors. This process led to the identification of a survey sample of nine supervisors and eighteen associates that would participate in the study.

Along with the feedback from executives from each of the organizations, additional criteria was used to provide the researcher with rich data to analyze. Supervisors were selected to participate in this study using the following criteria:

- Supervisors who have been in their current positions for at least 12 months and are responsible for the day to day supervision of warehouse associates.
- Supervisors who have been identified by their executive leadership team as leading highly productive teams of warehousemen.



 Supervisors who were willing to commit time to this study through participation in an EI assessment.

Findings and Interpretations

The research questions posed at the beginning of this study analyzed the impact of a supervisor's emotional intelligence (EI) on an associate's performance within a distribution environment. The research questions and data gathered from the eighteen interviews with associates have shown that there is an impact from supervisors that display attributes of EI and the daily performance of the associates that work for them. The data suggests that supervisors that display attributes of EI do influence an associate's performance, primarily by causing associates to increase their own productivity.

Major Findings

The major findings of this study are organized by research question.

Research Question 1

How do warehouse associates describe the impact of their immediate supervisor's overall emotional intelligence on their daily performance within a distribution center?

Major finding 1. The most important finding was that on average the eighteen associates interviewed identified the attributes of EI, when displayed by their supervisor, as having a significant impact on their effectiveness. Each component of EI—self-awareness, self-management, social awareness, and relationship management—was identified as having some impact or a significant impact on the associate's effectiveness. This finding is supported by research discussed in Chapter II of this document.

According to Cartwright and Pappas (2008), the visibility of the personal attributes of a leader, either negative or positive, often influence follower behavior. If a follower is



aligned and supportive of the behavior they see, they tend to perform at a higher level or perform "extra role" actions (p. 149).

Fourteen of the eighteen associates interviewed discussed how quickly their morale can be impacted by the supervisor. These fourteen associates represented all six participating companies. Many of the associates stated they look forward to working with supervisors who display attributes of EI, stating they feel aligned with the supervisor and often more engaged.

Research discussed in Chapter II of this document shows that associates are more aligned and supportive of organizational objectives when their supervisors display openness and display attributes of EI (Hurst, et al., 2014; Werther, 2003). This not only impacts the alignment between the supervisor and associate, but also can increase the associate's level of engagement. This engagement can lead to a more highly performing team (McCann, 2012, p. 23).

Research Question 2

What is the impact of a supervisor's self-awareness level on the daily performance of warehouse associates within a distribution center?

Major finding 2. Seventeen of the eighteen associates identified the attributes of self- awareness as having either significant impact or some impact on their effectiveness. Associates stated that these attributes—appropriate sense of humor, self-confidence, being conscientious, and being self-examining—have an indirect impact on their effectiveness. Associates discussed that when a supervisor displays confidence that the associate is more likely to bring issues negatively impacting their productivity to the supervisors. This allows issues to be addressed faster and subsequently increases



productivity. Associates shared stories of not being able to complete a task due to issues such as product in the warehouse being damaged or not being stored in the appropriate location. Associates stated that when a supervisor lacks confidence, the associates are likely to spend more time trying to correct the issue themselves or spend time finding someone other than the supervisor to help address the issue. This can add significant time to the completion of a task and negatively impact the associate's productivity.

In contrast, numerous associates stated that when the supervisor displays a level of confidence and an appropriate sense of humor that the associates are more likely to quickly seek guidance from their supervisor in order to address issues. Goleman, et al., noted that self-aware leaders are attuned to their inner signals, they recognize, for instance, how their feelings affect themselves and their job performance, and, in turn, how they interact with those they lead (2002). This interaction can lead to the building of more effective relationships between the supervisor and the associate. According to Fuller (1998) the relationship associates have with the leaders can lead to more highly engaged employees. This engagement has shown it can lead to better financial results, higher return on assets, lower employee turnover, and higher productivity from associates (Goleman, et al., 2002; Lee & Ok, 2014; Wong & Laschinger, 2012).

Research Question 3

What is the impact of a supervisor's self-management level on the daily performance of warehouse associates within a distribution center?

Major finding 3. The attributes of self-management—being positive, showing flexibility, having self-control, and having integrity—were identified by all eighteen associates as having significant impact or some impact on their effectiveness. These



attributes had the highest average ranking of all the attributes of EI amongst the associates. Additionally, the researcher identified the domain of self-management as the strongest competence amongst the supervisors with more than three-quarters of the supervisors earning a classification of either "A Strength to Build On" or "A Strength to Capitalize On" by the Emotional Intelligence Appraisal®—Me Edition. Associates made more than 141 comments during the interviews in regards to the positive impact that the supervisor's self-management behaviors have on the associate's effectiveness. The attributes of self-management were the only attributes that, according to associates, caused them to voluntarily increase their productivity. Numerous associates shared that when supervisors display attributes such as self-control and a positive attitude, they are more likely to keep calm when issues arise and the associates are more likely to have respect for the supervisor. Associates state that when they respect the supervisor they will work harder and try to complete their tasks more efficiently.

Amongst the attributes of self-management, being positive was both the most referenced attribute discussed during the interviews with associates, and was identified by the associates as the attribute having the most significant impact on their effectiveness.

All eighteen associates identified the attribute of being positive as having either a significant impact or some impact on their effectiveness. These results support the assertion that the positive mood of a team leader at work promotes worker effectiveness (Cherniss & Goleman, 2001). Additionally, these results show that there is a clear, positive impact on the productivity of an associate in a distribution environment when the supervisor displays emotionally intelligent behaviors, specifically self-management behaviors.



Research Question 4

What is the impact of a supervisor's social awareness level on the daily performance of warehouse associates within a distribution center?

Major finding 4. The attributes of social awareness—anticipating other's needs, knowing how to read an audience, understanding group dynamics, and being an active listener—were identified by fifteen of the eighteen associates as having either a significant impact or some impact on their effectiveness. The average classification for the supervisors within the domain of social awareness according to the Emotional Intelligence Appraisal®—Me Edition was "With A Little Improvement, This Could Be a Strength." One-third of the supervisors earned a classification of "Something You Should Work On" within this domain. During the interviews with associates, this domain was the least referenced in regards to the impact it has on an associate's performance.

The attributes of social awareness were the least referenced domain, but still had an indirect, but positive impact on associate's effectiveness. Numerous associates discussed the need for supervisors to understand potential obstacles to productivity and to be prepared to address them. Associates related that although it does not directly make them more effective, that by anticipating associates needs or being an active listener the supervisor's help prevent associates from becoming less effective due to known obstacles and issues that could be prevented. This supports research that shows that when leaders display emotionally intelligent behaviors and incorporate those behaviors into their work, they are more likely to create daily opportunities and dialog with subordinates about the work at hand and about the challenges they are facing in accomplishing their objectives (Cherniss & Goleman, 2001).



Major finding 5. Within the domain of social awareness, the attribute identified as knowing how to read an audience was identified as having the least impact of all the EI attributes. Although the attribute was identified as having some impact, some associates when further probed discussed that the distribution of work within a union environment is governed by seniority more than by the supervisor's understanding of group dynamics or by the supervisor's knowing how to read an audience. Associates that worked within a union environment also discussed that when seniority is ignored and supervisors distribute work based on group dynamics, that it give the appearance of preferential treatment and will actually cause those associates to be less effective.

In contrast to those associates that work in a union environment, approximately half of the associates surveyed discussed that there is some impact to their effectiveness when the supervisors understand the dynamics of the group and assign work according to skillset or desires of the group. Associates shared that this impacts teamwork as associates will end-up working with others with a similar skill set or even just someone with whom they have a better personal relationship. Associates further discussed not wanting to negatively impact the efforts of the team and therefore ensure that they are themselves staying effective and productive. This supports research that states that the more a leader allows their followers to exert their individuality the more its members will be open to placing their individualism aside for the good of the group (Cherniss & Goleman, 2001).



Research Question 5

What is the impact of a supervisor's relationship management level on the daily performance of warehouse associates within a distribution center?

Major finding 6. During the interviews, the attributes of relationship management were the most referenced attributes with the associates in regards to the impact they have on an associate's performance. Associates made more than 186 comments describing the positive impact these attributes have on their performance.

Amongst the supervisors, the domain of relationship management was identified as the second strongest competence with the average supervisor earning the classification of "A Strength to Build On" according to the Emotional Intelligence Appraisal®–Me Edition.

According to Goleman, relationship management refers to the ability to finding the right mix of empathy and appeal to garner buy-in and support from an individual (2011). Associates made more than 25 references in regards to the impact a supervisor can have when he displays the attribute of empathy. Associates discussed that they feel more effective when they know the supervisor listens to them and helps to find solutions for issues. More than half of the associates interviewed discussed that when their supervisor displays empathy they find work less stressful and they are able to give 100% of their efforts or more. Many associates further stated that when they know they can get guidance from their supervisor on how to perform a task more effectively, then they have no hesitation in looking for ways to be more effective.

All eighteen associates discussed the attributes of relationship management and the positive impact it has on their performance. Additionally, all eighteen associates



shared that they are more excited to come to work when they feel they have a positive relationship with the supervisor. This finding supports the research by Goleman, et al., which states one of the determinants of how productive associates are, is the quality of their relationship with their immediate boss (2011).

Conclusions

Using key findings, the researcher was able to draw conclusions from the data that address each of the research questions. Listed below are the conclusions below in order of the research questions that they answer.

Conclusion 1

Within a distribution environment, supervisors that display emotionally intelligent behavior, when working with associates, have a positive impact on the associate's daily performance. This behavior leads to an alignment with the supervisors and causes the associate to be more engaged. Goleman, et al. state that associates generally see the leader's emotional behaviors as the most valid, and model their own after it (2002).

When associates are more engaged, as a result of a positive interaction with their supervisor, they are more likely to understand and support both the supervisor's and the organization's objectives. This engagement can lead to higher individual performance as well as higher team performance. This supports the argument from Cherniss and Goleman (2001) that EI is essential to effective individual and organizational performance.

Associates indicated that their performance is immediately impacted when they interact with the supervisor. They discussed that when the interaction is positive, then their performance increases, and in contrast, when the interaction is negative or they



perceive they will have a negative interaction with the supervisor, then they are less effective and may perform at a lower level.

Conclusion 2

Supervisors that display behaviors of self-awareness—such as appropriate sense of humor, self-confidence, being conscientious, and being self-examining—when working with associates have a positive impact on the associate's daily performance.

Lubit's (2004) research shows that self-awareness refers to the ability to understand your own feelings, strengths, and weaknesses, and the ability to deal with your feelings in appropriate ways rather than having them adversely affect your performance.

Associates discussed that when they see attributes from the supervisor such as self-confidence and being conscientious that their performance increases. Associates state this performance increase is due to issues being addressed more effectively, and the associates feeling more confident in the supervisor's abilities and answers to issues.

According to Partridge (2011), demands within the food service industry change constantly due to such things as different dietary needs and trends, seasonal demands, allergies, and the marketing effectiveness of restaurants. These demands are amplified within a distribution center and can lead to performance issues for the associates when orders are changed, product is moved or obsolete, or when there is a shortage of product on hand, etc. These demands will cause associates to face numerous issues needing to be addressed. The data in this research shows that associates are more likely to have issues addressed and more quickly return to performing effectively when they see attributes of self-awareness in their supervisors.



Conclusion 3

When supervisors display attributes of self-management, there is a significant impact on an associate's performance. According to the results of the Emotional Intelligence Appraisal®–Me Edition, supervisors that were identified as being effective by their executives and subsequently participated in the research scored highest in this domain.

Self-management is defined as the ability to control emotions and have the ability to use them appropriately and effectively (Bradberry & Greaves, 2009; Cherniss & Goleman, 2001; Goleman, 1998). Associates stated that when they see these behaviors, they are likely to increase their own performance. Goleman, et al. (2002) argue that positive behaviors influence how effectively people work and that they boost cooperation, fairness, and business performance. Amongst the attributes of self-management when a supervisor shows positive behaviors, this has the most direct impact on associate performance. Associates stated they have greater respect for supervisors, will work harder and try to work more effectively for supervisors who display higher levels of self-management when interacting with associates.

Conclusion 4

Supervisors should practice more social awareness behaviors—such as anticipating other's needs, knowing how to read an audience, understanding group dynamics, and being an active listener—as they have been shown to have some positive impact on associate's performance. This was the weakest domain amongst the supervisors according to the Emotional Intelligence Appraisal®–Me Edition.



Although these behaviors have a less direct impact on associates performance, productivity and effectiveness are impacted most often when obstacles or issues detracting from productivity are anticipated and addressed proactively. Additionally, when supervisors practice the attribute of active listening, it gives associates the confidence that they can address issues and will be heard by the supervisor. This causes associates to address issues quicker and allows them to return to working effectively faster.

Conclusion 5

Supervisors that display the attributes associated with relationship management—such as influencing others, showing empathy, cultivating relationships, and inspiring teamwork—have the most direct and positive impact on the associate's daily performance. Research from Chapter II shows that the better the supervisors understand how other people view the world and what motivates them, the better they will be able to influence them to behave in ways that are helpful. Furthermore, when supervisors inspire teamwork, productivity, quality, morale, and other factors, employees feel they are part of a team working together to meet team objectives (Lubit, 2004; Fuller, 1998).

All eighteen associates identified the attributes of relationship management as having the most effect on their daily performance. They discussed that when they have a positive relationship with the supervisor, they feel more effective in the workplace.

Additionally, when they see the supervisor displaying behaviors that builds on their relationship with the associates, such as providing recognition or promoting teamwork, that they often emulate that behavior.



Implications for Action

Based on the conclusions identified in this study, the researcher suggests several implications for action. These recommendations are proposed to address the conclusions identified above.

Implication for Action 1

The results of this study revealed that emotionally intelligent behaviors shown by a supervisor within a distribution environment have significant impact on an associate's daily performance, both directly and indirectly. Although research shows emotionally intelligent behaviors such as, engaging employees and building a climate associates can thrive in, are critical to increasing performance and productivity (Cherniss & Goleman, 2001; Walumbwa, et al., 2008), traditional attempts to increase productivity in a DC focus more on investing in assets and technology (Bloom & Reenan, 2010; Syverson, 2011; "Worker Productivity," 2010).

Executives and those responsible for organizational development and training within an organization should develop training programs that help identify levels of EI as well as help develop EI amongst the supervisors. Often training programs, when they do exist within an organization are reactive or based on regulatory needs. Although this is still a critical requirement, organizations need to ensure their training programs include curriculum that focuses on the human interaction between supervisor and associate. The research in Chapter II shows that the organizational climate is responsible for up to 30% of performance (Cherniss & Goleman, 2001) and the current research suggests that supervisors can create a climate that has a positive impact on productivity. As organizations struggle to remain competitive, focusing on developing a skillset around EI



is just as critical as training to new technology or changing to meet new regulatory requirements.

Implication for Action 2

Associates identified that when supervisors have confidence in their own abilities and act in a manner that displays that confidence, and that they are approachable, that the associates will bring issues and obstacles negatively impacting productivity to them faster. The literature review shows, there are numerous customer demands, legislative requirements, and competitiveness within the supply chain that can create a very complex environment within the DC, making the tasks for the associates more complex. The faster an issue can be identified, the faster associates can return to working productively.

Having the confidence that allows supervisors to address issues and obstacles quickly only comes from having significant levels of occupational knowledge. This means that organizations should have a means of ongoing skillset development and training. As customers' demands change, technology changes, and legislation creates new requirements, organizations must ensure they are providing adequate training. Peter Drucker, who is often described as "the man who invented management," states that, "Training and development must be built into it on all levels—training and development that never stops" ("Drucker," 2015).

Executives within an organization should ensure there is adequate funding to provide ongoing training and development that allows all of its leaders to develop the appropriate level skillset. This training should lead to a skillset amongst leaders that effectively addresses the ever-changing environment and provides confidence to the associates in their supervisor's ability to address issues. This training should be ongoing



and should be proactive. Training professionals within an organization need to stay abreast of emerging issues within their industries and the changes it will cause in the work place. Training should provide supervisors new skillsets long before they are needed. This allows organizations to stay ahead of changing technologies and the everchanging competitive landscape. Richard Branson, founder of the Virgin Group, stated, "Train people well enough so they can leave, treat them well enough so they don't want to" (Virgin, 2016).

Implication for Action 3

Above all other attributes found within EI, being positive or having a positive attitude had the most direct impact on an associate's performance when they worked with a supervisor displaying that attribute. Research shows that the positive mood of a team leader at work promotes both worker effectiveness and retention, and the more positive the interaction is with the leader, the larger the impact that leader can have on the work climate (Cherniss & Goleman, 2001; Pearce et al., 2010; Schuh & Zhang, 2012). Research also shows that the climate created by working in a positive environment can account for up to 30% of the organizational effectiveness (Cherniss & Goleman, 2001). If for no other reason, Goleman, et al. (2002) argue that we naturally prefer being with people who are emotionally positive, in part because they make us feel good.

In order to ensure an organization is creating a positive environment, executives should ensure that 1. There is a method of evaluating the environment the associates work in, such as taking environmental surveys or associates surveys which ask direct questions in regards to the climate; 2. Organizations should incorporate some type of behavioral assessment with their supervisors, either in-service or prior to hiring, that



helps identify how supervisors will respond in conflict or how they positively engage associates, 3. Organizations need to have an action plan that addresses any negative connotations from the results of an environmental survey or from the negative results of a behavioral assessment conducted on a supervisor. Many off-the-shelf products have reliable predicative validity that can help assess these traits as well as survey the work environment. The results of both surveys and assessments should be used as one of the tools that help drive curriculum within a training program.

Implication for Action 4

Relationship management behaviors have the most significant impact on the performance of associates within a DC. Maciariello (2010), states a job involves an ongoing personal relationship between employer and employee. Supervisors should look for opportunities to cultivate that relationship with associates in order to drive their engagement. This study shows that associates work more effectively and are more engaged in an environment in which the supervisor is attentive to their needs, listens to them, and provides recognition. These attributes are a result of a supervisor cultivating a relationship with the associate. According to Bradberry & Greaves (2009), maintaining relationships takes time, effort, and know-how (p. 177). They further state that even relationships that appear effortless take effort to maintain (p. 177). This implies that supervisors should take extra effort to build and maintain positive relationships with the associates that work with them.

In order to promote the importance of relationship management behaviors, organizations should incorporate both training events and team building events, along with a mechanism to provide feedback for supervisors in to the organization. One



effective way to evaluate the relationship a supervisor has with associates is through a 360 degree feedback evaluation. This allows associates to provide anonymous feedback to the supervisors they work with, and can help a supervisor identify areas in which they need to improve.

Recommendations for Further Research

Numerous studies have shown the effectiveness of leaders that display emotionally intelligent behaviors and the impact those behaviors have on things such as financial performance or individual success. However, the researcher did not find any studies that show the impact of a supervisor who displays emotionally intelligent behavior on the daily performance of associates in a distribution center. The data from this study shows that supervisors that display emotionally intelligent behaviors have a significantly positive impact on the daily performance of the associates that work with them. Although significant data was gathered and analyzed for this research study, further investigation in this area is needed.

This researcher recommends that a study of the impact of a supervisor's emotionally intelligent behaviors on an associate's daily performance be done amongst distribution centers that have a collective bargaining agreement in place. This current study included both union organized associates and non-organized associates. The researcher identified some differences in the domain of social awareness and its impact on associates between the two different environments. These differences appeared to be due to presence of a collective bargaining agreement.

Another area that should be studied is the impact of a supervisor's level of EI on associates that work within other skillsets in a DC. A DC has more than just warehouse



associates and warehouse supervisors that ensure product is delivered to the customer. Numerous other skillsets add to the effectiveness of a DC within the supply chain. Skillsets such as transportation and customer service have a close relationship and impact on the customer. Drivers within the transportation department of a DC are responsible for bringing the product to the customer and often are considered the face of the company. Customer service representatives are considered the voice of the customer as they are the associates that receive the calls from the customer when there is an issue or complaint about the product that was delivered or when there is a need to order more product.

The current research focused on the impact of a supervisor's EI on the daily performance of associates and the findings suggest there is a positive impact. The current research did not study methods in which to increase levels of EI. Therefore, another area recommended for future study is the effectiveness of professional development programs that address the development of EI. The study should identify in which environments the programs are more effective. Some researchers suggest EI is more important in environments where associates exercise higher levels of emotional labor (Grandey, 2001). Additionally, future research should study if there are any demographic barriers or influences that would cause EI training to be more successful or less successful and how training is implemented most effectively.

Finally, other distributors within the supply chain should be studied. The current research focused on food distributors due to the complexities associated with things such as product turnover and legislative regulations that impact the interactions between the supervisors and the warehouse associates. Distributors of other products within the



supply chain have their own specific complexities they deal with when ensuring product is effectively reaching their customer. Other distributors may require either more or less interaction between supervisors and warehouse associates depending upon the type of product they deliver.

Concluding Remarks and Reflections

The primary purpose of this study was to understand the impact of a supervisor's emotionally intelligent behaviors on the daily performance of associates within a distribution environment. This study provided data that may cause executive and leaders within this environment to look at the processes involved in identifying, selecting, and/or promoting employees to the role of supervisor within a distribution environment. Additionally, this study may cause organizations to rethink their training and development strategies that provide supervisors the ability to understand, embrace, and display emotionally intelligent behaviors.

The researcher has experience working in this environment and specifically working as a human resource professional responsible for the areas of training and development as well as employee relations. The researcher has experience with leaders within this environment developing and growing due to having high levels of EI, as well as experience with leaders failing due to not understanding the importance of EI when working with associates in a distribution environment.

During this research, the researcher found numerous studies that indicated that EI is not as critical of a trait in a distribution environment as it may be in other environments such as hospitals, customer service centers, and other areas where "emotional labor" is more prevalent. The current study suggests that these statements are inaccurate, at least



within the participating organizations environments. Additionally, this study showed the researcher that interactions between a supervisor and associate within a distribution environment are more critical and have a larger impact than the researcher initially expected.

The researcher believes that the results of this study will cause executives, human resource professionals, and other leaders within a distribution environment to pay closer attention to the training and development of their front line supervisors. The researcher also believes that the conclusions drawn from this study will inspire supervisors in a distribution environment to embrace and further develop their own emotionally intelligent behaviors and use those skills to assist their associates in reaching their highest levels of effectiveness.

The researcher has experience in training and development, and ultimately hopes to encourage executives in his current and other organizations to fully embrace EI as a critical competency required amongst their leaders and to embrace this competency as a required skill that will drive performance and effectiveness in their organizations.



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APPENDICES



Appendix A

Synthesis Matrix

	Leaders values that impact or cause follower resistance	Leader versus organization value congruence	Leaderships impact on performance	Negative -Abusive Leadership	EI and predictive validity of improved performance	Gender based EI	Different jobs need different levels of EI	Measuring IE	Distribution	Increasing/Measure Productivity	Intelligence	Supply Chain	Emotional Intelligence	Increasing productivity	Self-Awareness	Self-Management	Social Awareness	Relationship Management
Allais, E. (2010). Wareho use metrics: Measure what matters.									x	х		х		х				
Bar-On, R. (1988).The development of a concept of psychological wellbeing.					x			X					x		X	х	х	х
Bergman, S.(2013, January 27).The global supply chain: Our economy, security and health depend on it.									x			x						
Bowling, N., & Michel, J. (2011). Why do you treat me badly? The role of attributions regarding the cause of abuse in subordinates' responses to abusive supervision			X	X										x			x	х
Bradberry, T., & Greaves, J. (2009). Emotional intelligence 2.0.									х				х		X	х	х	Х
Brockman, T.(1999).Wareh ousing trends.										X								
Cartwright, S., & Pappas, C.(2007, November 5).Emotional intelligence, its measurement and implications								х					х	х	X	х	х	х
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Appendix B

Interview Protocol

Interview Process and Instrument

Introduction

Hello, my name is Herb Callahan and I am a student in the doctoral of Organizational Leadership program at Brandman University. I am currently researching the Emotional Intelligence of supervisors, and the effects it may or may not have on associate productivity.

Project Goals

Within this mixed methods research, I am required to interview associates in a distribution center that have been identified as highly productive. The goal of my dissertation is to examine the importance of Emotional Intelligence characteristics of supervisors, as perceived by associates in a distribution center, in regards to how it impacts their productivity.

Eventual Product

Research is suggesting that a leader's ability to effectively manage their own emotions can lead to high levels of effectiveness and productivity for them and those they work with. Human Resources Professionals and Hiring Managers placing increased importance on Emotional Intelligence, which is quickly becoming a threshold quality, are likely to recruit supervisors who are more effective at leading teams to high levels of productivity.



Informed Consent

The interview will be audio recorded. I will also take anecdotal records. All of the information gathered is for research purposes only and your confidentiality will be maintained. The responses of this interview will be coded, sorted into patterns and trends to identify similarities amongst interview responses. This process of coding will allow me to organize these themes found into data that can be used to develop my study. The interview transcript will then be deleted and notes will be shredded. The interview consists of four main open-ended questions. I appreciate your willingness to participate in this study.

Interview Content and Questions

Good Morning/Afternoon...Thanks so much for consenting to meet with me. I really appreciate your involvement. Please be assured that all your responses will be held in complete confidence. No one will associate you with the responses you give. What you say will be combined with what others say to present an aggregate picture of what the impact of your supervisor's level of EI has to your level of productivity.

When you come to work, are there specific behaviors you are hoping to see from your supervisor?
 If Yes:

If No:

A. What type of behaviors do you	C. What type of behaviors do you
typically see?	typically see?
B. How do these behaviors impact you	
during your work day?	D. What impact do those interactions
	have on your productivity? Are some
See below	interactions more impactful on you
	than others?
	See below

2. Here is a list of attributes that may be found in leaders. Some undoubtedly



are among those you identified; others may not be. I would like you to put these into four groups: (Group 1) Those that have significant impact on your effectiveness; (Group 2) those that have some impact on your effectiveness; (Group 3) those that have little impact on your effectiveness; (Group 4) and those attributes that have no impact on your effectiveness at work. This is not a forced choice activity.

A.	Professional experience (as a supervisor + other operational roles)
	"Appropriate" sense of humor ("appropriate" defined in the eye of the
	interviewee)
C	Personal experiences outside of warehousing
D.	Positive; looks for ways to be helpful and constructive
	Pre-shift organization and distribution of workload
	Anticipates others needs
G.	Leads through influence
Н.	Sees the importance of working well with others; ability to work with
	others; collaboration skills
I.	Knows how to read an audience
J.	Empathetic to others and their needs
K	Flexibility; ability to adapt
L	Self-confidence; trust in their own ability
M	Fondness for and a natural affinity towards warehouse associates
	Understands a group's dynamics
O. ,	Self Control; temperament under pressure
P	Knowledge of the work for which the leader will be responsible
	Active listener
R.	Manages a shift skillfully; holds associates accountable appropriately
S.	Cultivates purposeful relationships
T	Is self-examining; uses self-reflection as a tool for personal
	improvement
U.	High quality warehousing knowledge; knows and practices effective
	leadership strategies for associates of all skill set levels
V	Inspires teamwork
W	Is conscientious; really cares about what goes on with the team
X	Integrity; congruence between what you say and what you do

3. If no, or predominantly no, EI domains are identified as "has significant impact, has some impact, has little impact, has no impact" then skip to question #4:

If Self-Awareness

Probe 1. You ranked (Appropriate sense of humor, self-confidence, self-examining,

If Self-Management

Probe 1. You ranked (Positive, flexible, self-control, having integrity) as having



conscientious) as having (significant impact, some impact, little impact, no impact) on your effectiveness, talk to me more about that or can you describe what that might look like on the warehouse floor?

Probe 2. Do you see these characteristics of your supervisor impacting your personal productivity?

2a. (if Yes) Can you tell me how it impacts you, or can you give me an example?

2b. (if No) Can you tell me a little more about how these characteristics impact you?

(significant impact, some impact, little impact, no impact) on your effectiveness, talk to me more about that or can you describe what that might look like on the warehouse floor?

Probe 2. Do you see these characteristics of your supervisor impacting your personal productivity?

2a. (if Yes) Can you tell me how it impacts you, or can you give me an example?

2b. (if No) Can you tell me more about how these characteristics impact you?

If Social Awareness

Probe 1. You ranked (Understanding group dynamics, Knows how to read audience, anticipates other's needs, is an active listener) as having (significant impact, some impact, little impact, no impact) on your effectiveness, talk to me more about that or can you describe what that might look like on the warehouse floor?

Probe 2. Do you see these characteristics of your supervisor impacting your personal productivity?

2a. (if Yes) Can you tell me how it impacts you, or can you give me an example?

2b. (if No) Can you tell me a little more about how these characteristics impact you?

If Relationship Management

Probe 1. You ranked (Influencing others, showing empathy, cultivating relationships, inspiring teamwork) as having (significant impact, some impact, little impact, no impact) on your effectiveness, talk to me more about that or can you describe what that might look like on the warehouse floor?

Probe 2. Do you see these characteristics of your supervisor impacting your personal productivity?

2a. (if Yes) Can you tell me how it impacts you, or can you give me an example?

2b. (if No) Can you tell me a little more about how these characteristics impact you?

4. Are there any other attributes that we did not previously discuss that you feel impact your productivity?

If Yes, then:

Can you talk to me about those characteristics and how they may be important to the



Table A1

Interview Instrument Codes	Identifying Attribute Letter
Self-Awareness	B,L,T,W
Component	
Self-Management	D,K,O,X
Component	
Social Awareness	F,I,N,Q
Component	
Relationship Management	G,J,S,V
Component	
General Attributes	A,C,E,H,M,P,R,U

End of Interview

I appreciate your participation in this interview. I would like to offer you an opportunity to make any final comments. Also, if follow-up or clarifying questions become necessary, would you be willing to participate? Thank you so much for your time today.



Appendix C

Informed Consent

INFORMED CONSENT FORM

INFORMATION ABOUT: Emotional Intelligence: A Leader's Impact on Productivity in a Distribution Environment

RESPONSIBLE INVESTIGATOR: Herbert Callahan

PURPOSE OF STUDY: You are being asked to participate in a research study conducted by Herbert Callahan, MBA, a doctoral student from the School of Education Doctoral Program at Brandman University. The purpose of this study is to explore and describe the impact of a supervisor's Emotional Intelligence (EI) on the productivity of the associates that work for them within a distribution environment. The study will strive to understand the impact of a supervisor's Emotional Intelligence through administration of the Emotional Intelligence Appraisal®—Me Edition and through the gathering of data through semi structured interviews from identified associates that work for them.

This study will fill in the gap in the research in regards to the impact a supervisor's EI may have on an associate's productivity within a distribution environment. The results of this study may lead organizations and leaders to explore and implement new methods that may increase both efficiency and productivity in a DC.

By participating in this study I agree to participate in a one-on-one interview (if a warehouse associate) or take the Emotional Intelligence Appraisal®–Me Edition (if a supervisor/manager). The interview will last about 45 minutes and will be conducted in person, by phone or electronically. The Emotional Intelligence



Appraisal® - Me edition survey will take approximately 30 minutes to complete. Completion of the focus group interview, one---one interview and electronic survey will take place January through February 2015.

I understand that:

There are minimal risks associated with participating in this research. I understand that the Investigator will protect my confidentiality by keeping the identifying codes and research materials in a locked file drawer that is available only to the researcher.

The possible benefits of this study to me is that my input may help add to the research regarding EI training programs hiring practices and the impact those programs and practices will have on the identification and developing of future distribution supervisors. The findings will be available to me at the conclusion of the study and will provide new insights about the impact of emotional intelligence within a distribution environment. I understand that I will not be compensated for my participation.

If you have any questions or concerns about the research, please feel free to contact Herb Callahan at calla113@mail.brandman.edu or by phone at 949-247-5056; or Dr. Doug Devore (Advisor) at ddevore@brandman.edu.

My participation in this research study is voluntary. I may decide to not participate in the study and I can withdraw at any time. I can also decide not to answer particular questions during the interview if I so choose. I understand that I may refuse to participate or may withdraw from this study at any time without any negative consequences. Also, the Investigator may stop the study at any time.



No information that identifies me will be released without my separate consent and that all identifiable information will be protected to the limits allowed by law. If the study design or the use of the data is to be changed, I will be so informed and my consent re-obtained. I understand that if I have any questions, comments, or concerns about the study or the informed consent process, I may write or call the Office of the Executive Vice Chancellor of Academic Affairs, Brandman University, at 16355 Laguna Canyon Road, Irvine, CA 92618, (949) 341-7641.

I acknowledge that I have received a copy of this form and the "Research Participant's Bill of Rights." I have read the above and understand it and hereby consent to the procedure(s) set forth.

Signature of Participant or Responsible Party
Signature of Principal
Investigator Date



Appendix D

IRB Approval



Page 1 of 3

BRANDMAN UNIVERSITY INSTITUTIONAL REVIEW BOARD IRB Application Action – Approval

Date: 0101201	6
Name of Investigator/Researcher: Herbert J Callahan	
Faculty or Student ID Number: B00213964	
Title of Research Project:	
Emotional Intelligence: A Leader's Impact on Productivity in a Distribution Environ	nment
Project Type: New Continuation Resubmission	
Category that applies to your research: Doctoral Dissertation EdD DNP Clinical Project Masters' Thesis Course Project Faculty Professional/Academic Research	
Other:	
Funded: No Yes	
Project Duration (cannot exceed 1 year): 4 months	
Principal Investigator's Address: 218 Sevilla Court. Alhambra, Ca. 91801	
Email Address: calla113Amail.brandman.edu Telephone Number: 626-673-2385	
Faculty Advisor/Sponsor/Chair Name: Doug Devore	
Email Address: ddevore@brandman.edu Telephone Number: 623-293-2424	
Category of Review: Expedited Review Standard Review	
Brandman University IRB Rev, 11.14.14 Adopted	November 2014



I have completed the NIH Certification and included a copy with thi NIH Certificate currently on file in the office of the IRB Chair or Dep	
Herbert J Callahan Ca	January 1, 2016
Digitally signed by Doug DeVore DN: cn=Doug DeVore, o=Brandman University, ou=EDOL, email=ddevore@brandman.edu, c=US Date: 2016.01.02 13:53:39 -07'00'	_ _{Date:} January 2, 2016

Brandman University IRB Rev, 11.14.14

Adopted

November 2014



BRANDMAN UNIVERSITY INSTITUTIONAL REVIEW BOARD IRB APPLICATION ACTION – APPROVAL COMPLETED BY BUIRB

IRB ACTION/APPROVAL

Name of Investigator/Researcher:
Returned without review. Insufficient detail to adequately assess risks, protections and benefits.
Approved/Certified as Exempt form IRB Review.
Approved as submitted.
Approved, contingent on minor revisions (see attached)
Requires significant modifications of the protocol before approval. Research must resubmit with modifications (see attached)
Researcher must contact IRB member and discuss revisions to research proposal and protocol.
Level of Risk: No Risk Minimal Risk More than Minimal Risk
IRB Comments:
Dr. Timothy IRB Reviewer: Perez Digitally signed by Dr. Timothy Perez Obc on Or. Timothy Pere
Telephone: Email: tperez@brandman.edu
BUIRB Chair: Doug DeVore Out and complete production of the contract of the co
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REVISED IRB Application Approved Returned
Name:
Telephone: Email: Date:
BUIRB Chair:
Brandman University IRB Rev, 11.14.14 Adopted November 2014

