Emotional Intelligence and Community Healthcare Productivity

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EMOTIONAL INTELLIGENCE AND COMMUNITY HEALTHCARE PRODUCTIVITY

by

Christopher Jacob Fox

Abstract of a Dissertation Submitted to the Graduate School of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

December 2013
Economic crisis is threatening state budgets. The strain on state budgets effects pensions and the healthcare benefits to communities. Rising healthcare costs and lagging insurance reimbursement rates are forcing healthcare organizations to sustain programs with fewer financial resources. Research studies indicate that payment increases from Medicare and Medicaid will not keep pace with the historical trend in hospital cost inflation (Kaufman, 2011). Of the healthcare facilities affected by federal budget constraints are community mental healthcare centers. The strain on state budgets has taken its toll on community mental healthcare facilities in particular struggling under the healthcare reform initiatives (Simpson, 1995).

With the economic decline and the impact on providing quality community healthcare, the increased need to maximize production of employees has become critical to sustainability. Researchers have found that employees who possess emotional awareness have a competitive advantage in their professional life and emotional intelligence has a significant impact on successful performance (Bar-On, 2010; Murphy, 2006). The skills found within emotional intelligence are foundational for individual development and are critical at all stages of employment. Employees in management roles are responsible for guiding, directing and inspiring direct reports (Saxenian, 1958).
The attributes of technical competence and ambition found within direct reports are insufficient to succeed as a middle manager (Saxenian, 1958). As employees climb the organizational ladder and take on management roles, they increasingly rely on emotional maturity for success (Saxenian, 1958; Selekman, 1946).

Three research objectives were established to determine what relationship exists between the perceived trait emotional intelligence of direct reports and middle manager Medicaid revenue productivity in a community mental healthcare center in south Mississippi. The target population included individuals from a community mental health facility provided Medicaid services 12 months prior to the study. This study used a non-experimental, cross-sectional descriptive design to address the research objectives and a 30-question paper survey instrument was used to collect quantitative data. The study population consisted of 198 employees that provide or supervise clinical services in the community mental healthcare center. Of the population, 89 employees (45%) from a community mental healthcare center responded to this study. Data was entered in to an excel spreadsheet and analyzed using SPSS 22.

Study results revealed that 60 (67%) of those who responded had 5 or more years of experience. The results showed no correlation between the perceived trait emotional intelligence of direct reports and productivity. The study also showed no correlation between the perceived trait emotional intelligence of middle managers and Medicaid revenue productivity of direct reports.
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CHAPTER I
INTRODUCTION

According to Goldberg and Petasnick, (2008) the global community is threatened by economic crisis. State budgets are severely out of balance, which affects pensions and healthcare benefits relative to state budgets. With healthcare costs rising disproportionately to insurance reimbursement rates, healthcare organizations are forced to sustain programs with fewer financial resources (Hammer & Schmidt, 2010).

Payment increases from Medicare and Medicaid will not keep pace with the historical trend in hospital cost inflation (Kaufman, 2011). The strain on state budgets has taken its toll on community mental healthcare facilities struggling under the healthcare reform initiatives. States are persistently searching for their own kind of reform in the hopes of containing costs while continuing to maintain quality (Simpson, 1995).

Several governors have called for budget cuts as great as 30% in the area of mental health programs. Mississippi plans to spend 13% less on mental health than would be needed to maintain current services. Greenblatt (2011) suggests that mental health programs paid for by general funds will suffer significant reduction. Although Medicaid funds about 60% of state mental health services, governors will be looking to cut back Medicaid funded programs due to significant cuts in federal stimulus money (Greenblatt, 2011). Figure 1 shows that in a Mississippi community mental health center, Medicaid funds 59% of the total 2011 budget for the provision of services. Figure 1 demonstrates the importance of Medicaid funding for mental health services in Mississippi (Pine Belt Mental Healthcare Resources, 2011). Since state agencies that assist in funding community support services are now realigning budgets, community health facilities are consequently realigning financial strategies (Johnson, Oliff, & Williams, 2011).
Figure 1. Sources of funding. This figure describes the funding sources during fiscal year 2011. Adapted from Pine Belt Mental Healthcare Resources, n.d., retrieved April 7, 2012, from http://www.pbmhr.com/docs/_annual_report.pdf

The public mental health system within the state of Mississippi consists of programs operated by the Mississippi Department of Mental Health, community mental health centers, and non-profit community mental health providers. In the state of Mississippi funding is shared among 15 Community Mental Health Centers (CMHC) and the Mississippi Department of Mental Health. With the decline of Mississippi’s mental health budget and sustainability of programs in jeopardy, Mississippi’s CMHC will be required to possibly eliminate programs that could leave communities without the delivery of needed services.

The need to maintain quality healthcare services with fewer financial resources has never seemed to be more crucial to healthcare sustainability efforts than at the present. A result of the current economic decline is the need to maximize productivity in the workplace (Goldberg & Petasnick, 2008). Businesses, including healthcare
organizations, have the difficult task of recruiting employees who possess characteristics to provide a high standard of productivity. According to (Rhoads, Ferguson, & Langford, 2006) productivity is defined in the healthcare field as both maintaining efficiency within the organization and meeting the needs of the community. Meeting consumer needs is imperative to organizational productivity because of the direct influence the business/consumer relationship has on organization revenue (Rhoads et al., 2006).

Although healthcare productivity is traditionally based on number of consumers treated, cost, and charges, meeting consumer needs is essential for return business and sustainability. Successful healthcare practices include being sensitive to the consumer’s perception of their needs and the mental healthcare employee’s interpersonal or soft skills, that create a pleasant experience for the consumer (Rhoads et al., 2006). The interpersonal qualities of the employee and the impact of the employee/consumer relationship in improving service delivery has been the topic of research studies (Goleman & Cherniss, 2001; Jelphs, 2006; Peterson, et al., 2011; Schoo, 2008). Interpersonal skills provide a foundation for professional success that are sometimes more significant than cognitive attributes (Bowles & Gintis, 2002). In a 2002 article, Bowles and Gintis postulate that personal attributes are more important determinants of educational and earning outcome than cognitive skills of social work students. Several studies cite personality, attitude and communication skills as more important than academic success or professional credentials for industry personnel (Bowles & Gintis, 2002; Seipel, Johnson, & Walton, 2011). These are the interpersonal skills that provide the foundation for emotional intelligence as a building block to productivity.
Background

With the economic decline and the increased need to maximize production of employees, some researchers focus on the relationship between emotional intelligence and productivity. Murphy (2006) and Bar-On (2010) note that employees who possess emotional awareness have a competitive advantage in their professional life and emotional intelligence has a significant impact on successful performance. This research is an indicator that emotional intelligence (EI) is relevant in the pursuit of organizational success.

The value of communication and other soft skills contributing to an individual’s EI are essential for sustainability in business, including the healthcare field (Bowles & Gintis, 2002). The need for healthcare employees to maintain soft skills, including quality communication, between the healthcare employee and the patient is critical for organization success (Rhoads et al., 2006).

Communication is a soft skill that can possibly have the greatest impact on effective healthcare delivery. Jelphs (2006) reports communication is key to clinical governance and demands as much attention, respect and maintenance as other seemingly harder targets in organizations, if relationships and systems are to be as effective as possible. Effective managers, clinicians, and leaders need to be able to communicate with a diverse range of people within and across organizations.
In addition to the role communication provides as a building block for success within an organization, employee self-awareness is also recognized as an essential skill (Jelphs, 2006). Goleman (1998) defines self-awareness as the ability to “recognize and understand your moods, emotions and drives as well as their effect on others” (Goleman, 1998, p. 95). Self-awareness is at the heart of what Goleman (1998) describes as emotional intelligence, and is key to understanding differences when working with others (Jelphs, 2006).

Mayer, DiPaolo, and Salovey (1990) and Salovey and Mayer (1990), define emotional intelligence as a trait or skill that assists people in adjusting and adapting successfully to their environments in a manner that allows them to manage and use their emotions and the emotions of others effectively to solve problems in a productive manner. In addition to the work done by Mayer et al. (1990) and Goleman (1998) identified five emotional skills within the EI framework that are foundational for individual development as the attributes contribute to development and maturity: 1) Emotional Awareness – recognizing the feelings within oneself and what impact the emotion plays in decision making; 2) Self Control – maintaining composure and impulsive feelings; 3) Trustworthiness/Consciousness – taking responsibility along with maintaining integrity; 4) Understanding Others – taking an active interest in other’s concerns, and 5) Developing Others – sensing other’s needs and supporting another’s abilities. The construct of trait emotional intelligence identifies a constellation of emotional self-perceptions located at the lower levels of personality hierarchies (Petrides, Pita, & Kokkinaki, 2007). Trait emotional intelligence places emphasis on traits found within the personality spectrum (Austin et al., 2010).
The emotional skills defined by Daniel Goleman provide a foundation for not only individual development and success but also organizational success. The development of emotional intelligence can be critical at all stages of employment especially as one matures and climbs the organizational ladder. Unless a manager matures emotionally as he gains experience, greater responsibilities increase the stress he feels and reduce his effectiveness as a constructive leader (Saxenian, 1958; Selekman, 1946). Just because an individual is established as an effective employee does not represent ability to manage. Saxenian (1958) cites an example of a manager who is technically competent but falls apart under stress. Leaders have to be able to manage stress. Someone might be an effective line employee but collapse under the stress of being a manager.

Organizations depend on high quality performance from employees committed to the organization’s vision (Gordon, 1996). This employee commitment, or loyalty, yields productivity that translates to profits. Gordon (1996) asserts that organizations must value employee commitment and loyalty in order to achieve desired productivity and profits. Productive employees are the foundation of organization initiatives and ultimately organization success. Soft skills, central to the core of Goleman’s Emotional Intelligence framework are critical within all levels of an organization, particularly as an organization grows (Zwick, 2004) and lead to increased performance and productivity (Bharwaney, Bar-on, & MacKinlay, 2007; Gardner & Stough, 2003; Goldberg & Petasnick, 2008; Goleman & Cherniss, 2001; Greenblatt, 2011; Luskin, Aberman, & DeLorenzo, 2005; Petrides & Furnham, 2001).
Productivity in the healthcare field is often measured by (1) employee efficiency, and (2) meeting community needs (Rhoads et al., 2006). Another measure of productivity is the number of hours billed divided by the number of billing hours available (Kossman, Lamb, O’Brien, Predmore, & Prescher, 2005). This calculation of hours billed and billing hours available is a common workload measure in mental healthcare. More specifically, since the primary funding source for Mississippi mental healthcare facilities is Medicaid, then Medicaid billing represents an objective standard of productivity measurement because it is quantifiable and critical to the sustainability of mental healthcare services.

Statement of the Problem

With the reduction of federal stimulus money affecting healthcare in general, mental healthcare programs in particular, and the financial challenges faced by healthcare organizations, the ability to hire and retain productive individuals while managing expenses is key to a healthcare organization’s growth and survival (Goldberg & Petasnick, 2008). Budget cuts in the field of mental health nationwide and in Mississippi threaten the sustainability of current mental healthcare services (Greenblatt, 2011). The need to employ highly productive individuals who possess skills which contribute to organizational success is important (Rhoads et al., 2006; Sheriff, 1968). The soft skills found within emotional intelligence appear to help organizations succeed by meeting community and consumers needs (Rhoads et al., 2006). Productivity is vitally important to businesses and is commonly recognized as a measure of organizational success (Proctor, 2012). With the decline in state mental health budgets, Mississippi community healthcare facilities must identify ways to maximize performance and productivity as they strive to financially sustain programs.
Purpose

The purpose of this study is to explore the relationship between perceived trait emotional intelligence and employee productivity as measured by Medicaid revenue in a CMHC in South Mississippi. The theoretical framework for this study recognizes the financial challenges experienced by CMHC’s in the State of Mississippi and the need for highly productive employees to support CMHC sustainability. The theoretical framework in Figure 2 examines employee or direct report’s perceived trait emotional intelligence and the effect EI has on direct report’s productivity as measured by Medicaid revenue.

![Conceptual Framework](image)

Indicates possible relationship

*Figure 2. Conceptual Framework.*
Research Objectives

The objectives of this study are to:

1. Describe the middle managers and their direct reports in terms of the number of years worked and positions held.
2. Determine the relationship between direct report Medicaid revenue productivity and perceived trait emotional intelligence.
3. Determine the relationship between the middle manager trait emotional intelligence perception and Medicaid revenue productivity average of their direct reports.

Significance of the Problem

The reduction of federal stimulus money and, consequently, the reduction of Medicaid funded programs have created budget constraints on community mental health agencies. Being able to improve human capital within the field of community mental healthcare due to budget constraints becomes more important. This study seeks to explore the relationship between trait emotional intelligence and employee productivity as measured by Medicaid revenue. Although the results from this study are applicable for mental healthcare organizations, the findings can be of value to multiple audiences. Managers, human resource personnel, and organizational recruiters within healthcare organizations recognize the importance of the organization/consumer relationship. The results of this study could be significant in terms of implications for selection, placement, evaluation and training of staff at all levels. Researchers can benefit from additional data regarding the value of trait emotional intelligence in particular within the healthcare field.
Definition of Terms

*Clinical staff.* Employees that provide and bill for services to consumers. These employees include Clinicians, Community Support Specialists and Day Treatment Specialists.

*Direct reports.* Clinical staff that report directly to middle managers.

*Emotional intelligence (EI).* EI is a competency that involves the capacity to manage emotions. The definition given by Salovey and Mayer (1990) for emotional intelligence (EI) is the ability to not only perceive accurately the emotions of others but also express and regulate emotion. Goleman (1998) identifies five key areas of emotional intelligence: (a) self-awareness, (b) self-regulation or management, (c) motivation, (d) empathy, and (e) social skills.

*Emotionality (EMO).* Individuals scoring high in Emotionality perceive and express emotions and use these abilities to develop and sustain close relationships with important others (Petrides, 2009).

*Middle managers.* Employees that provide direct supervision to clinical employees.

*Productivity.* Although Webster defines productivity as a measure of output per unit of input, the mental health facility in this study measures productivity as the billed Medicaid hours divided by expected number of Medicaid hours billed by direct reports.

*Productivity average.* Productivity average is the intermediate productivity value of the direct report group. Productivity average is determined by calculating the mean productivity score of the group of direct reports.

*Revenue Production (RP).* Revenue Production is the monetary amount the employee achieves.
Self–Control (SC). Individuals scoring high in Self–Control tend to regulate external urges, impulsivity, as well as stress (Petrides, 2009).

Sociability (SOC). The sociability factor assesses an individual in social contexts. Individuals that score high in sociability perceive themselves to confidently engage socially with a diverse group of individuals. Individuals possessing high sociability scores perceive themselves to communicate and listen to not only those within a close relationship context but diverse social contexts (Petrides, 2009).

Well–Being (WB). Individuals scoring high in Well–Being report positive feelings of happiness and fulfillment (Petrides, 2009).

Delimitations

The Trait Emotional Intelligence Questionnaire–short form instrument is used in this study to measure trait emotional intelligence. Although the TEIQue is a reliable and valid instrument, it is limited by the definitions used and measure for trait emotional intelligence. It is through this filter that the reader must understand the data. The population for this study is limited to one community healthcare facility in South Mississippi and may not reflect the reality in other organizations or industry as a whole.

Limitations

This study compared the results of global trait emotional intelligence to Medicaid production and is limited to direct reports and middle managers within a single community mental healthcare center in south Mississippi. Caution should be exercised to generalize findings to community mental healthcare centers beyond the scope of this study. In addition, the population of middle managers was low (n = 20), so consequently the response rate, although adequate at 60%, resulted in a low number of participants.
The community healthcare center participating in this study suffered from a tornado in February of 2013 destroying offices in South Mississippi and impacting the service population within the area. As a result direct reports and middle managers had difficulty finding meeting space for consumers and experienced consumer relocation that negatively affected production. Global emotional intelligence and production data were collected soon after the storm and therefore includes post-storm production data. Consequently, production data collected during the year of this study might be inconsistent with data gathered at another time frame.

**Summary**

This study examines the relationship between trait emotional intelligence perceptions of healthcare employees and managers along with the associated Medicaid revenue of those employees. The economic decline along with payment reform has forced the healthcare industry to reassess strategic financial plans (Goldberg & Fleming, 2011). Since state agencies that contribute in funding community support services are now readjusting financial plans, community health facilities are consequently realigning financial strategies (Johnson et al., 2011). Community mental health facilities in Mississippi are affected by this budget realignment as CMHCs are supported by Mississippi state agencies.

The emphasis on realigning financial strategies has required Mississippi community healthcare facilities to restructure their own financial plan. Industries outside of healthcare have long recognized the vital importance of productivity measurement on the success of a business enterprise (Proctor, 2012). Enhanced productivity expands a business’s capacity to create a quality product (Proctor, 2012). The importance of productivity within the business framework has become more of a focus for the community mental healthcare system in Mississippi to sustain quality programs.
This study intends to provide further insight into the relationship between trait emotional intelligence and revenue generated in a community mental healthcare facility. Furthermore, this study examines the relationship between the trait emotional intelligence of leaders within the same community mental healthcare facility and revenue generated by direct reports.
CHAPTER II
LITERATURE REVIEW

Introduction

The purpose of this study is to examine the relationship between the perceived trait emotional intelligence of employees in a community mental healthcare facility and employee productivity. The study also seeks to examine the relationship between the trait emotional intelligence perception of middle managers within a single community mental healthcare facility and their subordinates. This chapter explores relevant literature pertaining to trait emotional intelligence or EI and employee performance and productivity. The literature will provide the foundation of EI as well as supported benefits of EI within the business framework. An overview of major measures used to date to evaluate EI is presented along with the questionnaire that is used for this study.

The theoretical framework for this study examines an employee’s perceived trait emotional intelligence and what affect, if any, EI has on Medicaid revenue generated within a mental healthcare organization. Research from Goleman, (1998a); Barrett, (1999); Luskin et al. (2005) reports that personality characteristics measured within EI are a factor in the variability of employees (Barrett, 1999; Bharwaney et al., 2007; Goleman & Cherniss, 2001; Hosseinian, Yazdi, Zahraie, & Fathi-Ashtiani, 2008; Huang, 1997; Jelphs, 2006 Kim, Cable, Kim, & Wang, 2009; Luskin et al, 2005; Nafukho, 2010; Peterson et al, 2011; Rhoads et al., 2006; Smigla & Pastoria, 2000). The literature review examines three main areas of the literature. First, the issue of healthcare reform and the impact of the failing economy on community mental healthcare is discussed. Second, the review covers the establishment and construct of emotional intelligence in psychiatric literature. Finally, the review discusses EI and its impact on productivity and performance.
Healthcare Reform

Revision of healthcare bills has been the recent focus of the U.S. Government (Goldberg & Fleming, 2011; Goldberg & Petasnick, 2008; Johnson et al., 2011; Kaufman, 2011; Simpson, 1995; Spisak, 2007; Votruba, 2010). William Pewen, a former senior health policy advisor to Republican Olympia Snowe (as cited in Votruba, 2010) reported that three in four Americans say the health care system needs to be overhauled. One of the goals of healthcare reform is to provide affordable healthcare coverage to everyone. However, proposed healthcare revisions provide not only an expansion of government-funded insurance or Medicaid to cover 16 million additional low-income people but have limited access to enrollees due to reimbursement rates for needed services being severely under-funded. Spisak (2007) reports that since reimbursement rates for services are lower than the cost of providing needed services, some providers find it impossible to participate. Reimbursement rates not compensating for the full cost of healthcare services makes it almost impossible for healthcare organizations to provide needed services (Spisak, 2007). Gaps between payment of services and cost of services seem to create a burden on the service provider.
Kaufman (2011) assesses the disparity between reimbursement rate payment and cost, “In 2008, the hospital industry's aggregate payment-to-cost ratio from Medicare is 90.9%; from Medicaid, 88.7%; and from commercial payers, 128.3%” (Kaufman, 2011, p 9.). In addition, Spisak (2007) reports that although the federal government will provide additional subsidies to provide insurance to low-income individuals, those expire in 2016, leaving low-income specific programs a top target for budget-cutting governors and legislatures. This possible cut in hospital programs could result in decline of the service and consequently loss of healthcare revenue. This lack of revenue could eventually create sustainability issues for healthcare organizations and possibly decrease service options.

The decrease in services will not only hinder healthcare organizations but also consequently limit services for those that healthcare reform is attempting to provide services. According to Hammer and Schmidt (2010), much attention has been paid to the millions of uninsured Americans who will join the ranks of the insured under healthcare reform. However, much less attention has been paid to how reform elements will influence healthcare stakeholders. Many hospitals and healthcare systems are being forced to consider or enact layoffs and postpone or cancel capital-intensive projects. (Goldberg & Petasnick, 2008). The reform policies created to provide services to consumers seem to be crippling providers, which in turn cripple consumers.

As states struggle to address rising costs and healthcare constraints, budgets become stretched. Mississippi’s mental health budget has been reduced 7% from FY10 budgeted levels and 22% from FY09 budgeted levels (Johnson et al., 2011). Over time, these cuts have resulted in the reduction of 200 beds at the state mental health hospital, closure of 24 supervised apartments at a state residential center, closure of a state
adolescent dorm, and elimination of some early intervention programs (Johnson et al., 2011). Budgetary constraints reduce the number of state subsidized services and programs, which consequently seem to place burden on the community by limiting the same necessary programs.

Decline of programs and budgetary limitations seem to be forcing healthcare administration to restructure their financial framework (Wilensky, 2011). A projected 8.3% jump in healthcare spending is forecast for 2014 compared to 5.5% in 2013 (Hammer & Schmidt, 2010; Wilensky, 2011). With the increase in healthcare cost, healthcare organizations continue to confront the issue of recruiting the right talent while controlling expenses; both critical to maintaining a healthy revenue/expense balance (Goldberg & Petasnick, 2008). As noted by Austin (2010) current trends in healthcare culminate in the increase in expectations. This forces providers to develop and implement systematic processes to ensure delivery of quality and competitive healthcare services (Ford, 2010). Austin (2010) addresses the importance of this change in the focus to remain competitive. Higher growth in business is realized through the development of leaders and employees in emotional intelligence (Watkin, 2000). According to Kerfoot (1996), the leaders in healthcare organizations have a responsibility not only to the organization but also to the emotional needs of the organization’s employees.
The projected jump in healthcare spending, along with a decrease in insurance reimbursement, force a healthcare organization to take a close look at providing a high quality service. The focus of healthcare organizations toward a more personalized efficient healthcare employee can prove to be of value. By providing the highest quality service, consumer satisfaction and return business afford more opportunity for sustainable services. Employee relationships and consumer relationships together strengthen the financial integrity of organizations (Goleman & Cherniss, 2001; Watkin, 2000).

Productivity

Performance and productivity have been examined interchangeably at length throughout the years (Bharwaney et al., 2007; Dahl, 2009; Huang, 1997; Schoo, 2008). Productivity as defined by Webster’s (2013) is a measure of output per unit of input. Rhoads et al. (2006) describes productivity in the healthcare field as demonstrating proof or evidence of how efficient the healthcare worker is in performing his or her tasks, as well as how well the healthcare worker is meeting the needs of the community. Rhoads et al. (2006) says that not only is productivity important in terms of the number of patients seen but that the healthcare worker is available to patients as well as the community. Meeting consumers’ needs is one way to ensure return business. Rhoads et al. (2006) cites the need for healthcare employees to maintain quality communication between the healthcare employee and the patient. Both Sheriff (1968) and Rhoads et al. (2006) report that soft skills are essential for sustainability in the healthcare field. The ability to maintain a high level of productivity by attracting consumers seems important, but as Rhoads et al. (2006) mentions, being emotionally attentive to the needs of consumers is just as critical.
Just as the ability to maintain productivity is critical to healthcare sustainability, so is the ability to improve productivity. In 1982, a three-step approach to increase productivity is defined by Richard Lazar by identifying the creation of a productive corporate culture that is characterized by caring about employees, teamwork, and leadership. By creating a culture that emphasizes a care and concern for its employees, promotes trust and teamwork along with serving to enforce commitment of trust and decision-making, responsible and responsive leaders of an organization can improve employee productivity (Lazar, 1982). This three-step approach to productivity provided an environment that encouraged organizational growth and sustainability. Luskin et al. (2005) quantified the value of emotional intelligence training. In their research, four groups from two financial institutions attended a training course on emotional intelligence. When both productivity and quality of life are measured before and after the training, it is determined that overall average improvement in productivity is 25%, stress levels decreased 29%, and positive emotional states increased 24%. Quality of life and being able to manage anger is shown to exhibit positive change results (Luskin et al., 2005).

The relationships between employees, teams and leadership not only prove to be valuable in productivity, but in relationships between workplace, emotional intelligence, job satisfaction and commitment to organizations (Gardner & Stough, 2003). As identified in a 2003 study by Gardner and Stough, emotional self-regulation and emotional control seem to provide the strongest predictors of productivity. The emotional self-regulation or control identified by Gardner and Stough (2003) are foundational to emotional intelligence. Daniel Goleman identifies the self-management as well as recognition of emotions fundamental in achieving emotional intelligence (Goleman, 1998).
The interrelationships between employees, teams, leadership, emotional intelligence, job satisfaction, and organizational commitment prove to be valuable to productivity and in relationships between employees. Webster’s Dictionary (2013) defines relationship as “a state of affairs existing between those having relations or dealings.” A powerful relationship is based on goodwill and a mutual commitment to shared purpose that provides affirmation, inspiration, and personal transformation (De Nijis, 2006). According to Pope (1996), “If employees talk to each other, support each other, and help each other with the workload, companies will see dramatic increases in quality, productivity, and efficiencies.” (p. 56). Stable relationships within organizations seem to promote stable relationships beyond company walls. If healthcare organizations are going to succeed, stable relationships with consumers as well as the relationships between employees and leaders have to be cultivated (Pope, 1996).

Although relationships tend to play a vital role in the measurement of productivity and improving productivity in the workplace, the role of emotional stability continues to be an underlying common denominator. In a 2008 study, O’Neill and Kline divided seventy-eight individuals into ten teams and found a statistically significant positive effect between emotional stability and task performance. Thus, individuals with higher mean levels of emotional stability achieved higher task performance scores promoting higher levels of productivity.

According to a study presented by Goleman and Cherniss (2001), increased revenues and productivity are generated from better performers. The ability to manage emotions is shown to have a positive impact on performance, but employees working together promote decision-making and develop company ownership. Zwick (2004) reports that better performers promote decision-making and foster company ownership.
Employees not only feel more committed to the organization, thusly increasing quality of work, but balance production more effectively when helping to make workplace decisions (Zwick, 2004).

Goleman and Cherniss (2001) quantify the value of performance in their book *The Emotionally Intelligent Workplace*:

Superior performers produce 19 %, 32 %, 48 %, and 48 to 120 % more in low, moderate, and high complexity jobs and sales jobs, respectively. A median 24 % productivity increase from competency-based selection means the same amount of work can be done with 20.5% fewer staff (p. 64)

Maximizing the performance of staff in a high complexity industry such as healthcare is at the core of Goleman and Cherniss’ position. The ability to provide a high quality of service in the healthcare industry with fewer financial resources is key to sustainability. If healthcare organizations can maintain a high quality of care with fewer resources, healthcare organizations are better prepared to meet the demand of consumers. The sustainability of healthcare systems is contingent upon the ability of the employee in meeting the needs of the consumer (Rhoads et al., 2006). If meeting consumer healthcare needs can be achieved through fewer staff, sustainability efforts can be realized. As stated by Goleman and Cherniss (2001), increased employee productivity can be accomplished through emotional intelligence.

**Emotional Intelligence**

James Worthy introduced the study of employee relationships in a professional environment in 1950. Worthy (1950) identifies the importance of developing solid relationships within larger organizations between employees and administrative staff. Compared to larger organizations, smaller organizations represent simpler social systems
that consist of fewer people and levels. These smaller organizations allow for easier adaptability, which leads to more meaningful work since the value of the work itself to the organization can be related to easily. Smaller organizations create more face-to-face interaction between employees and administration and, consequently, closer relations. Although Worthy’s research addressed employee morale and relationships, the function of Worthy’s questionnaires were not a scale to obtain detailed information but rather an overall status of the organization (Worthy, 1950).

It was not until 1964 that William Wells developed an emotional quotient scale. Wells’ emotional quotient scale measured consumer emotional reactions to advertisements and provided a focus to the value of emotions in business (Wells, 1964). By 1990, Mayer and Salovey not only defined emotional intelligence, but also created a measurement for it. Mayer et al. define EI as “a type of emotional information processing that includes accurate appraisal of emotions in oneself and others, appropriate expression of emotion, and adaptive regulation of emotion in such a way as to enhance living.” (Mayer et al., 1990 p. 772). In 1998, Daniel Goleman provided practical value to the term emotional intelligence by illustrating real life examples where five skills, identified as emotional intelligence, would be beneficial. Goleman initially identifies four key areas of emotional intelligence. First, Self-Awareness or identifying the emotions one is experiencing. Second, Self-Management that Goleman defines as not allowing one’s emotions to control themself. Third, Empathy or the ability to perceive what someone else is feeling, and then the fourth is putting it all together in Skilled Relationships. Goleman (1998) adopted and expanded this definition of EI to include social and communication skills. Specifically, Goleman suggested that EI consists of five dimensions: self-awareness, self-regulation or management, motivation, empathy, and social skills.
The study of EI dimensions provides insight into its impact on organizational performance. Emotions and their effect on performance are one of the five key factors in Barry and Stewart’s (1997) five-factor analysis model. This five-factor model includes extraversion, openness to experience, emotional stability, agreeableness, and conscientiousness. Much like Goldberg, Barry and Stewart recognize the ability to manage emotions as a key element in positive relationships. Barry and Stewart (1997) define emotional stability as being associated conversely with being anxious, depressed, angry, embarrassed, worried, and insecure. Positive relationships prove to be critical for success in relationships and consequently effective teams.

*Emotional Intelligence and Teamwork*

The emphasis on effective teamwork within healthcare organizations in particular has become more crucial to organizational success and increased productivity (Kerfoot, 1996). As employees move from working in isolation to working in teams, people who possess highly developed emotional intelligence are the most effective at being a team member, a team leader, and a positive participant (Kerfoot, 1996). As mentioned by Kerfoot (1996) organizations consequently have an increased responsibility to foster positive relationships and teamwork within organizations.

O’Neill and Kline (2008) determined that teamwork within organizations entails employee agreeableness and predisposition to participating in teams (O’Neill & Kline, 2008). Teamwork, autonomous work groups and the reduction of hierarchies provide establishments with an additional productivity advantage (Zwick, 2004).

Teamwork, interpersonal skills, self-awareness, self-regulation are predictors of successful performance and achievement (Bar-On, 2010). The researcher Bar-On
(2010) suggests that degree of overlap between empathic relationships, emotional intelligence and positive outcomes of performance are too extensive to overlook. Goleman and Cherniss (2001) indicate that building blocks of emotional intelligence entail development of social skills and teamwork behavior. The creation of productive corporate culture is characterized by teamwork, caring about employees, and leadership (Lazar, 1982).

**Leadership and Direct Reports**

A leader is tasked with inspiring, directing and coordinating the work of direct reports (Saxenian, 1958). The difference, Saxenian states, between leaders and direct reports is responsibility. Leaders are responsible for the work of direct reports along with financial and organizational pressures of management. Technical competence, intelligence and drive that determine direct report success are no longer sufficient in a management role (Saxenian, 1958). The researcher Saxenian (1958) states that emotional maturity is important at this level in an organization.

**Emotional Intelligence and Leadership**

Goleman (1998) reports that the five emotional intelligence attributes are fundamentally significant for leaders. Watkin (2000) notes that while some personal qualities such as maturity and getting along with others are crucial to effective leadership and employees, specific EI behaviors are associated with individual and organizational performance as well. Goleman (1998) says that only one-third of employee skills relate to raw intelligence and technical expertise, which leaves two-thirds to other skills related to emotional intelligence. Research on more than 500 organizations by the Hay Group and Goleman (1998) shows that:
• EI accounts for over 85% of outstanding performance in top leaders.
• EI - not IQ - predicts top performance.
• EI can be enhanced through specialized coaching development

Positive leadership has been associated with outcomes that include happy relationships, teamwork, learning, recognition, staff retention, and health and wellbeing (Schoo, 2008). Evidence supports emotionally intelligent leaders in workplaces are able to bring about positive outcomes because leaders attune to emotions that move people around them (Goleman, Boyatzis, & McKee, 2002). Bharwanay et al. (2007) found that the emotional intelligence of leaders in a restaurant setting significantly influences annual profit growth.

Emotional intelligence was found to not only improve productivity but to improve life satisfaction (Luskin et al., 2005) *The Study of Business Performance, Employee Satisfaction, and Leadership* by the Wilson Learning Corporation found that 39% of variability in corporate performance is attributable to the personal satisfaction of employees (Barrett, 1999). The same study found that 69% of the variability in personal satisfaction is attributable to the quality of employee relationship with their manager and the manager’s empowerment skills (Barrett, 1999). In fact, emotional intelligence - the ability to inspire and motivate others - should be recognized just as important as intellectual intelligence in running successful organizations (Barrett, 1999). Kerfoot (1996) identified the importance of leaders “leading with the heart” (p. 59). “These people can analyze the emotional side of issues, determine how people will react, and develop programs to help staff with the emotional side of work-related issues” (Kerfoot et al., 1996, p. 59.).
Goleman (as cited in Mason, 1999, p. 52) examined the impact of emotions on employees in 1996. An organizational-behavior study followed PepsiCo division heads in Asia, Europe, and the U.S. researchers found that "division heads strong in six or more emotional-intelligence competencies out-perform their yearly revenue targets by 20%. If they're weak in the same range of competencies they under-perform by 18-20 percent" (p. 52). Studies by both PepsiCo and the U.S. Navy indicate that organizations with emotionally intelligent leaders provide an environment that encourages performance and productivity. The PepsiCo and U.S. Navy studies indicate that emotionally intelligent leaders are individuals that subordinates can approach with both good and bad news while remaining level-headed as well as a leader that enjoys getting to know the employee (Goleman & Cherniss, 2001; Mason, 1999).

Successful leaders seem to possess a number of attributes that contribute to successful performers (Goleman & Cherniss, 2001; Mason, 1999). In Kotter’s (1982) study conducted between 1976 and 1981 of successful general managers, ten character traits were identified common among leaders—power, achievement, ambition, emotional stability, optimism, intelligence, analytical ability, intuition, a personable style, and an ability to relate easily to a broad set of business specialists. The ability to manage emotions or emotional stability has been shown to be vital in emotional intelligence (Kotter, 1982). Goleman (1998) points out that effective leaders are alike in one aspect, that effective leaders have a high degree of emotional intelligence. Goleman (1998) suggests that if efficacy of leadership is critical to organizational growth and sustainability, then emotional intelligence is the key element binding success.
Emotional Intelligence and Employees

The importance of the efficacy of an organization’s leadership cannot be underestimated, but perhaps more importantly serves the individuals themselves with higher EI. Amitay and Mongrain, (2007) report that partners of emotionally intelligent participants reported being more conscientious, better at problem-solving and open to experiences, offering some evidence of the stress-buffering hypothesis associated with higher EI. The benefit of the ability to buffer the stressors sometimes associated with higher-level positions is critical for management (Amitay & Mongrain, 2007). The focus on stress management, communication, and the ability to problem solve become more of a focus for upper management positions and thusly seem tested more frequently than lower levels within an organization. Sheriff (1968) notes that as one climbs an organizational ladder, his need for technical skills becomes less important, provided he has competent subordinates and can help them solve their problems. Technical skills, while responsible for many of our great advances, appear to be more important to the lower levels of an organization (Sheriff, 1968). Sheriff identifies six characteristics of successful management including the soft skill of mental and emotional maturity. Sheriff (1968) defines this skill as "one who has control of himself. He is neither crushed by defeat nor over-elated by victory. He has a high frustration tolerance and his antisocial attitudes (prejudices and hostilities toward groups and individuals) are at a minimum." (Sheriff, 1968, p. 34). These character traits recognized by Sheriff and Kotter provide a foundation for emotional stability that seems to encourage employee growth and productivity. The ability of problem solving and managing a variety of administrative tasks is of utmost importance in a leadership role and therefore provides leaders who possess emotional intelligence an edge. Sheriff (1968) further states that as individuals advance to leadership positions the skills associated with problem solving become more significant in administrative roles.
The problem solving skills associated with emotional intelligence is explored over the years throughout many corporations. Researchers have suggested that people who are emotionally aware have a competitive edge in their personal as well as their professional lives, and are as a consequence happier and more successful. Employee morale and efficiency is the focus of Sears, Roebuck and Co. in the early 1940’s (Worthy, 1950). Sears focused on increasing efficiency within the corporation by analyzing employee morale through survey data. Sears' questionnaires had the simple, straightforward purpose of finding out how well employees liked their jobs, what their attitudes were toward supervision and management, and what factors in their employment situation might be contributing to dissatisfaction or poor working relationships. Sears recognized the importance of relationships in performance and routinely surveyed employees to identify departmental challenges (Worthy, 1950).

**Measurement of EI–Trait vs. Ability EI**

With an increased interest in emotional intelligence, the measure of this construct has grown. As EI research has developed it has diverged into two subfields, trait, and ability EI (Petrides & Furnham, 2003; Petrides, Furnham, & Mavroveli, 2007). The ability EI perspective takes as a starting-point the presumption that EI is a cognitive ability which is not measured by standard intelligence tests and which relates to reasoning and problem solving in the emotional domain (Ford, 2010; Gardner & Qualter, 2010; Petrides & Furnham, 2001; Petrides et al., 2007; Sanchez-Ruiz, Perez-Gonzalez, & Petrides, 2010). Austin et al. (2010) mentions that by contrast, the trait EI perspective regards EI as being located within the personality domain. Therefore, ability EI places more emphasis on intelligence test scores and less on personality, whereas trait EI places more emphasis on personality traits (Austin et al., 2010).
As reported by Austin et al., (2010), the two versions of El are distinct and do not measure the same construct. The measurement methods for the two forms of El differ. Ability El tests resemble standard intelligence tests, while trait El is measured via self-report; correlations between trait and ability El test scores have consistently been found to be low. Trait measures show medium to large correlations with the major five-factor model (Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness) personality dimensions, and are generally not correlated with intelligence (Austin et al., 2010).

The operationalization of trait EI is straightforward because the construct encompasses self-perceptions and dispositions, which accord with the subjective nature of emotions. The construct of trait emotional intelligence refers to a constellation of emotional self-perceptions located at the lower levels of personality hierarchies (Petrides et al., 2007). The self-perceptions identified as trait emotional intelligence are measured with the Trait Emotional Intelligence Questionnaire. The Trait Emotional Intelligence Questionnaire (TEIQue) is a psychometric instrument created by Dino Petrides that is designed to measure emotional functioning.

**TEIQue**

Since there are many questionnaires testing trait EI it is important to identify advantages of the TEIQue. The TEIQue integrates the trait EI construct into mainstream models of differential psychology compared to other trait EI questionnaires that separate intelligence or competencies by asking questions such as “I’m good at understanding the way other people feel.” The TEIQue covers the fifteen facets of EI comprehensively whereas other tests typically overlook some of these facets. (Cooper & Petrides, 2010)
The Trait Emotional Intelligence Questionnaire is a self-report questionnaire that has been developed to cover the trait EI sampling domain comprehensively. The TEIQue is a broadly defined comprehensive measure that covers all facets of trait EI as postulated by the Petrides and Furnham (2001) framework (Gardner & Qualter, 2010). The TEIQue includes four compound scales that encompass 15 subscales: (a) well-being: happiness, optimism and self-esteem; (b) self-control: control/emotion regulation, stress management and impulsiveness (low); (c) emotionability: emotion expression, empathy, emotion perception (self and others) and relationship skills; and (d) sociability: social competence, assertiveness and emotion management (others) (Gardner & Qualter, 2010). Gardner and Qualter, (2010) point out that self-motivation and adaptability do not belong to any of the four factors.

Gardner and Qualter (2010) compared three trait EI tests: 1) The Multidimensional Emotional Intelligence Assessment (MEIA), 2) Schutte Emotional intelligence Scale (SEIS) and 3) The Trait Emotional Intelligence Questionnaire (TEIQue). The researchers examined concurrent criterion validity of the measures in predicting a range of theoretically relevant psychological constructs and The Trait Emotional Intelligence Questionnaire or TEIQue is the superior predictor of multiple psychological criteria. In fact, at each hierarchal level and on average, the TEIQue is the strongest predictor of all 11 criteria (one exception includes the higher level analysis in which no EI measure predicted significant variance in verbal aggression), and significantly predicted the most criteria as a higher-level construct (Gardner & Qualter, 2010).

The TEIQue is a superior predictor at each level significantly predicting a broader range of criteria compared to the The Multidimensional Emotional Intelligence Assessment (MEIA) and Schutte Emotional intelligence Scale (SEIS) (Gardner &
Qualter, 2010). The researchers Gardner and Qualter (2010) note that the TEIQue is also a consistently stronger predictor (as evidenced by higher average validity coefficients) than both the MEIA and SEIS. Even at the higher levels of assessment (global scores), where each EI measure carried only one degree of freedom and the TEIQue is unable to capitalize on chance associations, it is still stronger (Gardner & Qualter, 2010).

Summary

The literature review shaped the theoretical framework supporting the rationale for this study and the manner in which it is conducted. Understanding the impact budgetary constraints are having on Healthcare provides the initial groundwork for the study of employee productivity. The review of the impact emotions have on relationships, decision-making and leadership skills come from the business community. The influence of emotions on performance in the corporate environment is addressed in this literature review.

Emotional intelligence is still a fairly new concept. The ability to conceptualize emotional intelligence provides a focus for studying certain factors that affect productivity. The review of the assessment measure used for this study provides justification for choosing the results of a particular instrument.

Research studies have been conducted drawing conclusions regarding the connection between emotional intelligence and performance. In addition, there are research studies linking emotional intelligence of employees and leaders to productivity. The conclusions from those studies raise questions about whether emotional intelligence plays a role in healthcare productivity. The conclusions raise questions as to whether emotional intelligence plays a role in the productivity of subordinates of leaders with
emotional intelligence. The findings from emotional intelligence, employees, and leaders provided the rationale for pursuing this study.

Chapter II provided the theoretical framework for this proposal by addressing relevant aspects of emotional intelligence and employee performance as well as productivity. That framework shapes the rationale for this study and the manner in which it is conducted. Chapter III provides a description of the procedures for collecting, organizing, and analyzing the data that led to answering the research objectives.
CHAPTER III
RESEARCH DESIGN AND METHODOLOGY

Introduction

This study explores the relationships between perceived trait emotional intelligence and community mental healthcare employee Medicaid revenue productivity. This chapter will address three major aspects of the study. First, this chapter presents the research design. Second, this chapter presents the objectives, population involved, instrumentation, the processes for collecting and analyzing the data. Lastly, Chapter III addresses the ethical assurances to protect the anonymity of participants in this research.

The goal of this study is to explore the relationship between the perceived trait emotional intelligence perceptions of direct reports and managers in a community mental healthcare center and the annual Medicaid revenue of direct reports. This study measured trait emotional intelligence using the Trait Emotional Intelligence Questionnaire short form or TEIQue-sf and compare trait emotional intelligence perceptions to employee Medicaid revenue production.

According to Bharwaney et al. (2007), Gardner and Stough (2003), Goleman and Cherniss (2001), and Luskin et al., (2005), studies focus on the impact of EI on organization productivity, but few studies are in the field of healthcare. Although Rhoads et al. (2006) states that employee efficiency and meeting community needs is the standard measure of productivity in the mental health industry the production standard used in this study consisted of Medicaid revenue. This production standard targets budget issues specifically affecting community mental healthcare facilities. Since budget cuts in Mississippi threaten the sustainability of current mental healthcare
services, Mississippi community healthcare facilities strive to financially sustain programs (Greenblatt, 2011). The need to maximize employee performance and productivity to address budgetary constraints becomes more relevant.

Research Design

This study employs a non-experimental, cross-sectional descriptive design to address the research objectives. Creswell (2003) suggests that quantitative approaches are usually best when trying to determine relationships between two or more variables. The qualitative approach, with a focus on establishing "the meaning of a phenomenon from the views of participants" (p. 16), was considered, but is inappropriate considering the objectives of the research. Consequently, a quantitative research approach is used for this study.

Creswell (2003) asserts that quantitative methods are predetermined questions that may contain performance data, attitude data, observational data, and census data that are statistically analyzed with a statistical interpretation. In quantitative research, two strategies of inquiry are normally employed: experimental and non-experimental designs (Creswell, 2003). Experimental research involves controlling the environment as much as possible whereby the researcher manipulates the independent variable and identifies a control group. In non-experimental research, the researcher does not control the environment and the variables are measured as they occur in practice (Muijs, 2004). Polit and Beck (2004) assert that non-experimental studies are appropriate when study participants are not subject to manipulation. This study does not attempt to manipulate the participants (or variables) and does not include a control group. Thus, the design of this study is considered non-experimental.
There are three non-experimental research designs classified in terms of time 1) cross-sectional, 2) longitudinal, or 3) retrospective. This study is not classified as longitudinal or retrospective since data was not collected in a forward direction nor are present or past statuses represented. This study is most appropriately classified as cross-sectional because data is collected from direct reports and middle managers at a single point in time or during a relatively brief time period (Johnson, 2001).

Non-experimental quantitative research designs can be classified into three categories including 1) descriptive, 2) predictive, and 3) explanatory research (Johnson, 2001). This research does not attempt to predict or explain the cause of the relationship so predictive and explanatory statistics are inappropriate for this study. Since the intent of this study is to describe relationships, descriptive research is used.

Non-experimental research is defined as a category of research in which relationships among variables are studied. Salkind (1999) asserts that non-experimental research methods do not intend to establish any causal relationships between variables. This study seeks to investigate the relationship between the variables of trait emotional intelligence and revenue. No causal relationship between the variables is investigated.

Non-experimental research in which questions are asked and answered concerning the relationship among the data is called correlational research. Salkind (1999) goes on to say that correlational research explains any relationship among the data and may also lead to predictions of how one variable can be predicted by others if relationships exist and are identified. This study seeks to explain the relationships between employee and middle manager trait emotional intelligence perceptions and Medicaid employee revenue productivity.
Research

The objectives of this study are to:

1. Describe the middle managers and their direct reports in terms of the number of years worked and positions held.
2. Determine the relationship between direct report Medicaid revenue productivity and perceived trait emotional intelligence.
3. Determine the relationship between the middle manager trait emotional intelligence perception and Medicaid revenue productivity average of their direct reports.

Population

The study includes direct reports and their middle managers who provide Medicaid revenue services within a single community mental healthcare facility in south Mississippi. This study investigates the relationship between EI perceptions and the previous year’s Medicaid revenue production. The target population from which archival data is collected includes individuals from the mental health facility who provided Medicaid services 12 months prior to the study. The target population was identified using the Medicaid revenue production report generated by the facility.

Four types of data characterize quantitative research methods: performance data, attitude data, observational data, and census data (Creswell, 2003). Census method data collection refers to collecting data on certain variables from every member of the target population (Singleton & Straits, 2005). Since the population of direct reports and their middle managers employed at least one year are asked to participate in the study, census data collection is the method data is collected.
As seen in Table 1, the direct reports for this study are identified as Community Support Specialists, Day Treatment staff, and Clinicians. The number of direct reports in the population is 178 Bachelor and Master level Community Support Specialists, Day Treatment staff and Clinicians who provide Medicaid services. Twenty middle manager staff supervises direct reports that generate Medicaid revenue bringing the total population of direct reports and middle managers to 198. The age of participants is between 24 and 55 years of age.

Table 1

*Summary of objectives, population, data collection, and analysis*

<table>
<thead>
<tr>
<th>Research Objective</th>
<th>Population</th>
<th>Data Collected</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective One</td>
<td>Middle managers, direct reports</td>
<td>Archival data/Production report</td>
<td>Descriptive Statistics</td>
</tr>
<tr>
<td>Objective Two</td>
<td>Direct reports</td>
<td>TEIQue – sf and Production report</td>
<td>Pearson’s correlation coefficient</td>
</tr>
<tr>
<td>Objective Three</td>
<td>Middle managers, direct reports</td>
<td>TEIQue – sf and Production report</td>
<td>Pearson’s correlation coefficient</td>
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</table>

**Instrumentation**

This non-experimental study utilizes the short form of the Trait Emotional Intelligence Quotient Inventory (Cooper & Petrides, 2010; Gardner & Qualter, 2010; Sanchez-Ruiz et al., 2010). The Trait Emotional Intelligence Questionnaire short form (TEIQue-sf) is a 30-item self-report scale that yields a global measure of EI. Many instruments have been used in the measurement of emotional intelligence. The selection
of the Trait Emotional Intelligence Quotient Inventory was based on the instrument’s sound validity and reliability (Petrides & Furnham, 2006). Research objectives two and three are addressed by the questions in the TEIQue-sf.

EI is measured using the Trait Emotional Intelligence Questionnaire short form or TEIQue-sf (Petrides & Furnham, 2006), derived from the TEIQue long form (Petrides & Furnham, 2003). The TEIQue has demonstrated an internal consistency of .90 for the global trait EI score (Petrides & Furnham, 2006). Freudenthaler, Neubauer, Gabler, Scherl, and Rindermann (2008), reported “moderate to strong correlations with all subscales of the other trait EI Inventories” (p. 675). The short form was adapted by including two questions from each of the 15 subscales in the long version. Each of the 15 subscales is identified as elements within the construct of trait emotional intelligence.

The TEIQue-sf consists of 30 questions using a 7-point Likert Type scale ranging from (1) (completely disagree) to (7) (completely agree) designed to provide a global EI score. The short form of the TEIQue is ideal for use when trait EI is a peripheral variable. Although the TEIQue-sf is intended to provide a global score, the four factors of Emotionality, Self-Control, Sociability, and Well-Being of trait emotional intelligence can be determined at a lower internal consistency. The internal consistency of the TEIQue-sf has been reported as .88 (Petrides & Furnham, 2006). Since this study only seeks to measure global EI the TEIQue-sf is most appropriate. The use of the TEIQue-sf does not require special permission if used for educational purposes.
Procedures

The TEIQue-sf was administered to direct reports and middle managers to measure the participants’ EI perception. Medicaid revenue of direct reports was collected through a production data report that includes archival Medicaid production data from the facility. The production data report distinguishes Medicaid production data using employee codes and identifies the middle manager, date of hire, and position title of each employee code listed. Permission to use archival Medicaid production data was obtained from the community mental healthcare facility where the participants are employed and is included in Appendix A.

As indicated by the letter in Appendix A the community mental health institution in south Mississippi agreed to provide all required employee demographic and revenue data. EI and its dimensions are operationalized as responses to questions on the TEIQue – sf (Cooper & Petrides, 2010; Gardner & Qualter, 2010; Sanchez-Ruiz et al., 2010). Direct reports and middle managers were asked to rate their degree of agreement with each of the 30 items of the TEIQue-sf on a seven-point Likert-type scale. Responses to questions such as “I usually find it difficult to regulate my emotions” and “I’m usually able to influence the way other people feel” are rated from (1) (completely disagree) to (7) (completely agree). Responses are summed and divided by the total number of items. Data was collected via self-report on the Trait Emotional Intelligence Questionnaire short form in the final phase of research procedures.

A representative from the community mental health center’s Human Resources Department acted as the liaison between the researcher and middle manager direct reports in order to maintain confidentiality. In Phase 1, the researcher gathered demographic and Medicaid production data of direct reports and middle management staff from the
production data report. The researcher used the production data report to identify middle managers who supervise direct reports that bill Medicaid. Demographic and production report data was organized and entered into an Excel spreadsheet for use in data analysis. The production data report contained archival Medicaid revenue production data, identification of middle manager, date of hire, and position title.

A prenotice email was sent in Phase 1 by the Human Resources liaison to the 20 middle managers identified from the production data report with notification of the upcoming study. This notification explained the purpose of the study, importance of their participation and timeframe (within two weeks) to expect the questionnaire. The purpose of the prenotice email, according to Dillman et al. (2009), not only communicates the importance of the study, but also establishes a positive and timely notice of the study. The prenotice email served as notification to middle managers of the upcoming research materials and their role in the study. The prenotice email provided a prior notice to participants that seems to build anticipation and interest that decreases survey nonresponse (Dillman et al., 2009). Instructions, questionnaires, and manila envelopes were organized and grouped according to middle manager to ensure that each program received a sufficient number of questionnaires. The researcher sent 198 sets of instructions, questionnaires, manila envelopes, and a self-addressed stamped envelope to the HR liaison. Within a week after receiving the questionnaires during Phase 1, the HR liaison distributed the questionnaires and manila envelopes to the 20 middle managers via interoffice mail.
In Phase 2, 20 middle managers distributed and nine middle managers collected and returned 76 questionnaires. Instructional procedures outlining directions for middle managers and directions to provide direct reports were included in each questionnaire packet. 178 direct reports were instructed by the 20 middle managers that they are encouraged, but under no obligation, to complete the questionnaire. The 178 direct reports were orally instructed by the 20 middle managers to write their five digit employee code on the questionnaire, place and seal the questionnaire in the manila envelope when done to ensure anonymity and return to their middle manager immediately.

The community mental health center in this study uses a five-digit employee code system assigned to each employee at hire. Employee data is compiled using this employee code system to protect confidentiality of employees and is the system used for this study. Prior to completing the questionnaire, the 178 direct reports were instructed by the 20 middle managers to include their employee code on the questionnaire after completion. This five-digit employee code was used to pair questionnaire responses to Medicaid production data of the 178 direct reports at the mental health facility during Phase 3.

Participants were given two weeks to complete the questionnaire. The researcher received 76 questionnaires from nine middle managers at the end of Phase 1. After two weeks, the researcher followed up with the remaining 11 middle managers via reminder e-mail. The 11 remaining middle managers were instructed to send all questionnaires back to the HR liaison. The HR liaison placed all the manila envelopes of remaining questionnaires in the self-addressed envelope to the researcher. The researcher then discontinued data collection two weeks following the reminder email. After the reminder
email 3 of the remaining 11 managers and 18 of their direct reports returned completed surveys for a total of 89 responses. All completed questionnaires and demographic data were scored and then entered into an excel spreadsheet for data analysis. Data analysis is discussed later in this chapter.

As seen in Table 2, the researcher’s initial contact with middle manager staff established a time frame of two weeks to expect receiving the research materials (TEIQue-sf). This initial contact was the prenotice email sent by the HR liaison as discussed earlier. The staff of 20 middle managers was provided instructions from the researcher included in the questionnaire packet on disseminating and collecting all TEIQue-sf. The paper form of the TEIQue-sf was used as the preferred method of completion. A web based method was considered, but tends to yield 11% lower response rates than other survey methods (Manfreda, Bosnjak, Berzelak, Haas, & Vehovar, 2008).

Table 2

*Procedures outline*

<table>
<thead>
<tr>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
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<tr>
<td>Weeks 1 - 3</td>
<td>Weeks 4 and 5</td>
<td>Weeks 6 - 8</td>
</tr>
<tr>
<td>Researcher gathered production report data and descriptive data of 198 employees</td>
<td>20 middle managers disseminated TEIQue-sf to 178 direct reports</td>
<td>Researcher followed up with 11 middle managers who did not return questionnaires</td>
</tr>
</tbody>
</table>
Production report data consisted of only the employee codes associated with each piece of production data. Since production report and questionnaires used employee codes, the anonymity of the data entry was maintained to reduce potential bias. Data was entered into an Excel spreadsheet. Conditional formatting and a research assistant ensured accuracy of data entry.

The researcher maintains that no human subjects involved in this study were at risk of harm or injury as a result of taking part in this study. Staff was under no obligation to participate. The researcher completed the required Institutional Review Board (IRB) forms providing information about the principal investigator, type of review, number of subjects, title of project and type. Prior to collecting the data the researcher submitted all sections of the IRB form including description of project, procedures, methods, and participants to The University of Southern Mississippi’s Institutional Review Board (IRB) for their approval in support of this research.
Data Analysis

The procedures outlined in the previous section provide data to analyze the study’s three objectives. Data collected from the questionnaires and the production report was analyzed using SPSS 22.0. Descriptive data addressed Objective One and provided the job title of the participants, the number of staff that participated in the study as well as the mean number of years employed at this community mental health center.

Objective Two analyzed global Trait EI of direct reports with Medicaid revenue production of the same direct reports participant. The population size of direct reports and middle managers studied is 198. The Pearson product-moment correlation coefficient was used to analyze the parametric variables in Objective Two. The Pearson correlation coefficient was used to assess the degree quantitative variables are linearly related (Green & Salkind, 2008). The interval variables in this study include global Trait EI scores and direct report’s productivity measured by Medicaid revenue production percentage.

Objective Three assesses the relationship between productivity average of middle manager direct reports and the perceived global trait emotional intelligence perceived by middle managers. The Pearson product-moment correlation coefficient was used to assess the degree productivity average of middle managers direct reports and the perceived global trait emotional intelligence are linearly related.

*Internal and External Validity*

Internal and external validity refer to whether the effects of a study were caused by the experiment and that the results of the study can be generalized. Shadish, Cook and Campbell (2002) elaborated and outlined four related types of validity: Statistical conclusion validity, internal validity, construct validity and external validity. Statistical
conclusion validity refers to the ability to infer a relationship between two variables. According to Shadish et al. (2002) internal validity refers to whether a causal inference can be made between two variables. Of the many threats to internal validity is the selection and maturation of participants.

Selection is explained by differences between participants existing prior to the study. Since the entire population of direct reports and middle managers employed were encouraged to participate, the threats to selection were reduced. Any results from the study might be attributed to differences that exist between direct reports and middle managers that have been employed longer than one year prior to the study. In other words, since employees with more than one year of experience were grouped, differences between employees with a few years experience and many years experience might exist. According to Shadish et al. (2002) faulty randomization or non-participation within groups are threats to internal validity.

Shadish et al. (2002) explain that changes take place naturally over time due to maturation of participants. The maturation of direct reports and middle managers threatens internal validity of a study if participants aging could explain the outcome of the study. Maturation threats are often addressed by ensuring that participants are similar in age (Shadish et al., 2002). Direct reports and middle managers in this study were various ages, however since the study is cross-sectional and taking place during a single point in time, maturation threats were reduced.

Another threat to internal validity is events that take place during the course of the study referred to as history. The community healthcare facility participating in this study suffered from threats to internal validity due to a tornado in February of 2013 destroying offices in south Mississippi and impacting the service population within the area. The
devastation of the tornado created unique challenges for staff in meeting the needs of the community. Some of the challenges included providing meeting space for consumers, consumer relocation, and staff relocation. This event possibly influenced production data and therefore threatened internal validity. Both Global EI and production data were collected after the storm, which includes post-storm production data.

Construct and external validity both refer to generalizations. Construct validity refers to whether sample constructs can be generalized to higher order constructs. External validity refers to the degree a causal relationship retains when there are differences in persons, settings, treatments, and the outcome (Shadish et al., 2002). The ability to generalize an outcome could be compromised if the outcome was possibly influenced by unique qualities in these four areas of the study.

Production data was collected throughout the entire nine county region covered by the CMHC in south Mississippi to allow collection of data by all eligible employees including those not affected by the tornado. Since a portion of employees was subject to the challenges posed by the tornado, the researcher acknowledges that Medicaid revenue production might be negatively influenced.

Because the focus of research involved one CMHC in south Mississippi the researcher acknowledges the limitation of generalizability in this study. The research questions focus on a single CMHC in south Mississippi and the ability to generalize results to another CMHC are left up to the discretion of the consumer of the research. These limitations are described in Chapter V.

Summary

According to Greenblatt (2011), serious budget cuts are threatening the sustainability of mental health programs in Mississippi. Since Medicaid funded programs
fund on the average 60% of mental health programs, any threat to reduction of this revenue were detrimental to the facilities that utilize Medicaid funds (Greenblatt, 2011).

The purpose of this study is to determine the relationship between employee generated Medicaid revenue and the personal attributes within trait emotional intelligence in a community mental healthcare center or CMHC in south MS.

The three objectives driving this study include not only determining the relationship between perceived trait emotional intelligence and Medicaid revenue of Direct reports in a community mental health center in a twelve-month period, but also the relationship of middle manager trait emotional intelligence scores the average Medicaid revenue of direct reports. Participant confidentiality and anonymity were addressed and the researcher maintains that participants were not in danger of harm or injury as a result of participation. In Chapter IV, the results of the study were analyzed and presented.
CHAPTER IV
RESULTS

Introduction

The purpose of this study is to explore the relationship between perceived trait emotional intelligence and employee productivity as measured by Medicaid revenue in a CMHC in South Mississippi. In order to accomplish this purpose, production report data was collected from the organization’s archival records. The Trait Emotional Intelligence Questionnaire – Short Form was distributed and gathered by an HR liaison and collected by the researcher. Data was organized and analyzed using SPSS 22.

The results of this study are presented in this chapter. Demographic information including the job title of the participants, the number of staff participating in the study, as well as the mean number of years employed at this community mental health center were collected to address Objective One. The Pearson Product-Moment correlation coefficient was used to analyze the correlation between global trait emotional intelligence of direct reports and productivity as measured by Medicaid revenue production percentage variables in Objective Two. Objective Three used the Pearson Product-Moment Correlation to assess the relationship between perceived Medicaid revenue productivity average of middle managers’ direct reports and the perceived global trait emotional intelligence perceived by middle managers.

Response Rate

The middle managers and direct reports used in this study totaled 198 in the total population and included middle managers, Community Support Specialists, Clinicians and Day Treatment Specialists. Of the 198 questionnaires distributed, 89 staff responded yielding a response rate of 45%. Of the 89 employees responding to the questionnaire,
14 (50%) are Day Treatment Specialists, 31 (69%) are Clinicians, 32 (30%) are Community Support Specialists and 12 (60%) are middle managers. 5 (3%) of the 89 questionnaires were returned incomplete, resulting in unusable data.

Of the 109 (55%) employees not included in the study as participants, 19 (9%) were employees who responded but did not meet the one-year employment criteria, and 85 (43%) did not respond to the questionnaire. Table 3 summarizes the population, number of participants and response rate by job title.

Table 3

*Job Titles surveyed and Response Rate by Job Title*

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Population N</th>
<th>Participants n</th>
<th>Participant mean # of years employed</th>
<th>Response Rate (n/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Support Specialists</td>
<td>105</td>
<td>32</td>
<td>6.6</td>
<td>30%</td>
</tr>
<tr>
<td>Clinicians</td>
<td>45</td>
<td>31</td>
<td>7</td>
<td>69%</td>
</tr>
<tr>
<td>Day Treatment Specialists</td>
<td>28</td>
<td>14</td>
<td>4.7</td>
<td>50%</td>
</tr>
<tr>
<td>Middle managers</td>
<td>20</td>
<td>12</td>
<td>14.75</td>
<td>60%</td>
</tr>
<tr>
<td>Total</td>
<td>198</td>
<td>89</td>
<td>8.28</td>
<td>45%</td>
</tr>
</tbody>
</table>
Data Analysis

Research Objective One

Results from Research Objective One describe the middle managers and their direct reports in terms of the number of years worked and positions held. Job titles, population of staff participating, mean number of years employed and mean number of years of total population is identified in Table 3. The mean length of employment for the 89 staff members participating in the study is 8.28 years.

The middle manager group (n=12) reported the longest employment history with the organization with 14.75 years. Clinicians (n=31), averaged 7 years experience in the position, followed by 6.6 average years of experience for Community Support Specialists (n = 32). Participants identified as Day Treatment Specialists (n = 14) reported the lowest number employment in the current position with 4.7 years.

Research compiled the descriptive data needed for Objective One to identify the job title of the participants, the number of staff participating in the study, as well as the mean number of years employed at an outpatient community mental health center in South Mississippi. Descriptive data revealed that middle management has the longest tenure of participants in this study. The only job title whose participants averaged less time on the job than their population counterpart was Day Treatment Specialists (4.7 years vs. 7 years). The results of Objective One suggest that middle managers have the most experience in this community mental healthcare facility and day treatment specialists have the least experience within the context of this study.
Research Objective Two

Research Objective Two determined the relationship between direct report productivity and trait emotional intelligence score on the Trait Emotional Intelligence Questionnaire - short form. The population of direct reports includes Community Support Specialists, Clinicians and Day Treatment Specialists. Descriptive data was entered into SPSS 22 and the following data analyses were conducted according to the approved study method.

The global EI score, direct report production, and the number of years participants have been employed at the community healthcare center is shown in Table 4. Thirty Likert style questions with a range from (1) Completely Disagree to (7) Completely Agree were asked to determine a global trait emotional intelligence score.

Table 4

Descriptive Data of Direct Reports

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Report Production</td>
<td>77</td>
<td>.38</td>
<td>1.12</td>
<td>.811</td>
<td>.163</td>
</tr>
<tr>
<td>Years employed</td>
<td>77</td>
<td>1.0</td>
<td>21.0</td>
<td>6.532</td>
<td>4.318</td>
</tr>
<tr>
<td>Global EI Score</td>
<td>77</td>
<td>3.97</td>
<td>6.80</td>
<td>5.72</td>
<td>.533</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Global trait emotional intelligence is defined by Petrides (2009, p. 62) as “a broad index of emotional functioning.” Lower global EI scores correlate with neuroticism, introversion, anxiety, psychopathology, turnover, maladaptive coping, truancy, job stress,
ruminatio and humility (Petrides, 2009). On the opposite end of the EI spectrum, Petrides reports that higher EI scores correlate positively with extraversion, consciousness, mental health, job satisfaction, organizational commitment, seniority, prosocial behavior, popularity, sensitivity, overconfidence, social desirability, and hubris. The Trait Emotional Intelligence Questionnaire was used to measure the trait emotional intelligence of the 89 employees participating in this study to determine the relationship between EI and productivity. (Petrides, 2009).

Archival production data from the community mental health center report that production values for direct report staff range from 38% to 112%, with an average production of 81%. The results shown in Table 5 reveal that production scores vary among direct report participants (38% to 112%) with 5 direct reports achieving less than 51% production and 5 direct reports achieving greater than 100% production that is the target production goal at this community mental health center.

Table 5

<table>
<thead>
<tr>
<th>Distribution of Production</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>&lt;51%</td>
</tr>
<tr>
<td>51% - 60%</td>
</tr>
<tr>
<td>61% - 70%</td>
</tr>
<tr>
<td>71% - 80%</td>
</tr>
<tr>
<td>81% - 90%</td>
</tr>
<tr>
<td>91% - 100%</td>
</tr>
<tr>
<td>&gt;100%</td>
</tr>
</tbody>
</table>
The community mental health center participating in this study considers any production score less than 100% to be under target performance. Production goals vary among direct reports but goals are no greater than 30 hours per 40 hour workweek. Global trait emotional intelligence scores vary also with scores ranging from 3.97 to 6.8.

The Pearson Product-Moment correlation coefficient was used to analyze the relationship between global trait emotional intelligence and direct report Medicaid revenue productivity. Table 6 displays the results for research Objective Two and The Pearson product-moment correlation.

Table 6

*Correlation Analysis of Direct Reports*

<table>
<thead>
<tr>
<th></th>
<th>Global EI Score</th>
<th>Direct Report Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Report Global EI Score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>-.003</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.976</td>
</tr>
<tr>
<td>N</td>
<td>77</td>
<td>77</td>
</tr>
<tr>
<td>Direct Report Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-.003</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.976</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>77</td>
<td>77</td>
</tr>
</tbody>
</table>
Although production values range from 38% to 112%, the results for the Pearson Product-Moment correlation coefficient report no correlation between perceived global EI and direct report Medicaid revenue Medicaid revenue production, $r = .003$, $p > .05$ ($p = .976$), indicating that perceived global EI for direct reports does not positively or negatively influence Medicaid revenue production. The scatterplot summarizes the results (Figure 3). Overall, no correlation was found between the perceived global trait emotional intelligence scores of direct reports and direct report Medicaid revenue productivity. The results reflect that perceived global trait emotional intelligence traits of direct reports do not correlate the Medicaid revenue productivity percentage of the direct report.

![Figure 3 Global EI and Direct Report Productivity Scatterplot](image.png)
Research Objective Two determined the relationship between direct reports’ Medicaid revenue productivity and their perceived trait emotional intelligence on the Trait Emotional Intelligence Questionnaire - Short Form. Results showed no statistically significant correlation between the perceived trait emotional intelligence of direct reports and direct report Medicaid revenue productivity with p > .05 (p = .976). The results suggest that the traits of perceived trait emotional regulation including the ability to perceive feelings, self control, sociability and feelings of well-being do not correlate with Medicaid revenue production achievement.

The inclusion of high and low Medicaid revenue productivity of direct reports was presented to illustrate the distribution of years employed, Medicaid revenue production scores and perceived trait emotional intelligence scores. The mean Medicaid revenue production score for top and bottom quartile of direct reports is 103% and 46%. However, the perceived global EI score of top quartile and bottom quartile Medicaid revenue production earners is equal at 5.54. The average number of years employed is between top and bottom Medicaid revenue production achievers are 6.56 years and 6 years respectively. These results agree with Pearson’s R results that there is no correlation between perceived global trait emotional intelligence traits and direct report Medicaid revenue productivity.

Research Objective Three

Research Objective Three assessed the relationship between the Medicaid revenue productivity average of middle managers’ direct reports and the perceived global trait emotional intelligence of middle managers. Twelve of the twenty (60%) of the middle managers responded to the questionnaire. Medicaid revenue of direct reports was collected through a production data report that includes archival Medicaid production
data from the facility. The production data report was grouped by middle manager for ease of pairing direct report to middle manager, production, and perceived global trait emotional intelligence score.

The production values for middle management staff range from 65% to 99% with an average production of 81%. The target production score for direct reports and middle managers at the community mental health center in this study is 100%, and any production score below 100% is considered under performance.

Trait emotional intelligence scores were calculated by the researcher for each participating middle manager, according to the instrumentation protocol. As seen in Table 7 the perceived mean global trait emotional intelligence score of middle managers is 5.44 and the mean productivity score for participating middle management staff is 81%. The scores for middle managers on the Trait Emotional Intelligence Questionnaire range from 4.23 to 6.47, with an average score of 5.44 on a 7 point scale. Table 7 indicates that middle managers achieve a global EI score of 5.44, which is above Petride’s theoretical mean (3.5) and population norm of 5.11.

Table 7

Descriptive Data for Middle Managers

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Report Productivity Average</td>
<td>12</td>
<td>.65</td>
<td>.99</td>
<td>.811</td>
<td>.107</td>
</tr>
<tr>
<td>Years employed</td>
<td>12</td>
<td>6.0</td>
<td>30.0</td>
<td>14.750</td>
<td>6.917</td>
</tr>
</tbody>
</table>
Table 7 (continued).

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global EI Score</td>
<td>12</td>
<td>4.23</td>
<td>6.47</td>
<td>5.44</td>
<td>.524</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Petride, a high global EI score is not necessarily indicative of adaptive behaviors, yet reports that high global trait emotional intelligence scores might mean participants are more likely to possess traits such as extraversion, consciousness, mental health, job satisfaction, organizational commitment, seniority, pro-social behavior, popularity, sensitivity, overconfidence, social desirability, and hubris.

The production values for middle management staff range from 65% to 99% with a direct report Medicaid revenue production average of 81%. The target Medicaid revenue production score for direct reports and middle managers at the community mental health center in this study is 100%, and any production score below 100% is considered “under performance.” The standard deviation for global EI was .524 and .107 for direct report productivity average, which indicates that most global EI scores and productivity scores were close to the mean scores.

The Pearson product-moment correlation coefficient was used to analyze the relationship between Medicaid revenue productivity of middle managers’ direct reports and the perceived global trait emotional intelligence of middle managers. Table 8 displays the results for Research Objective three and the Pearson product-moment correlation.
Table 8

*Correlation Analysis of Middle Managers*

<table>
<thead>
<tr>
<th></th>
<th>Global EI Score</th>
<th>Productivity Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle Manager Global EI Score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>-.435</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.157</td>
</tr>
<tr>
<td>N</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

|                           |                 |                      |
| Direct Report Productivity Average |                 |                      |
| Pearson Correlation       | -.435           | 1                    |
| Sig. (2-tailed)           | .157            |                      |
| N                         | 12              | 12                   |

Although the results for the Pearson product-moment correlation coefficient are not significant, the results indicate a negative correlation between middle manager perceived global EI and the Medicaid revenue productivity average of their direct reports, $r = .435$, $p > .05$. A negative correlation suggests that as perceived global trait emotional intelligence scores increase, the Medicaid revenue production of direct reports decreases. In other words, the results reflect that perceived global trait emotional intelligence traits of middle managers do not correlate or influence the Medicaid revenue productivity percentage of the direct reports that the middle managers supervise.
Although the results suggest a negative correlation between the perceived trait emotional intelligence scores of middle managers and middle manager direct report Medicaid revenue productivity with $p = .157$, the results indicate no statistical correlation of significance with $r = .435$, which is above a .05 significance threshold ($p > .05$). The results reflect that the global trait emotional intelligence traits as perceived by middle managers have no influence over the Medicaid revenue productivity of the direct reports the middle managers supervise. The scatterplot in Figure 4 summarizes the results.

Figure 4. Global EI and Supervisor Productivity Average Scatterplot.

Overall no correlation was determined between the global trait emotional intelligence scores of middle managers and direct report productivity. Global trait emotional intelligence as perceived by middle managers did not correlate with the Medicaid revenue
production scores of direct reports. This indicates that the perceived trait emotional functioning of middle managers has no relevance on Medicaid revenue productivity of direct reports.

Descriptive data for the top and bottom quartile direct report Medicaid revenue production is presented in Table 9. Medicaid revenue production earners in the top quartile have been employed an average 6.56 years, while Medicaid revenue production earners in the bottom quartile average 6 years. This suggests that direct report Medicaid revenue production within the top quartile average 103%. The perceived average global EI score for direct reports in both the top and bottom quartiles of Medicaid revenue production earners is 5.54. This finding supports Objective Two results of no statistically significant correlation between the perceived trait emotional intelligence of direct reports and their Medicaid revenue productivity score.

Table 9

*Descriptive data of direct report production*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean Years Employed</th>
<th>Mean Global EI Score</th>
<th>Mean Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct report Production of top 25%</td>
<td>9</td>
<td>6.56</td>
<td>5.54</td>
<td>1.03</td>
</tr>
<tr>
<td>Direct report Production of bottom 25%</td>
<td>6</td>
<td>6</td>
<td>5.54</td>
<td>.46</td>
</tr>
</tbody>
</table>
The descriptive data of high (top 25%) and low (bottom 25%) middle manager Medicaid revenue production is shown in Table 10. Middle managers employed an average of 17 years supervise direct reports who average 95% Medicaid revenue production. Middle managers who have been employed an average of 15 years supervise direct reports with a 69% Medicaid revenue production.

Table 10

**Descriptive Data of Middle Manager Medicaid Revenue Production**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean years employed</th>
<th>Mean Global EI Score</th>
<th>Mean direct report production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle Managers in top 25%</td>
<td>3</td>
<td>17</td>
<td>5.18</td>
<td>.953</td>
</tr>
<tr>
<td>Middle Managers in bottom 25%</td>
<td>3</td>
<td>15</td>
<td>5.58</td>
<td>.690</td>
</tr>
</tbody>
</table>

The difference in years employed (6.56 and 6) and Medicaid revenue production (103% and 46%) suggests that middle managers employed longer supervise direct reports who achieve higher Medicaid revenue production averages. The average for global EI perceptions for Medicaid revenue production earners scoring is 5.18 and 5.58 for the top and bottom quartiles, respectively. Although the difference in global EI scores suggests that middle managers with lower global EI perceptions tend to supervise direct reports who achieve higher Medicaid revenue production averages, no statistically significant correlation was determined between perceived trait emotional intelligence of middle managers and the Medicaid revenue production of direct reports.
Research Objective Three assessed the relationship between Medicaid revenue productivity average of middle managers’ direct reports and the perceived global Trait Emotional Intelligence of middle managers. Results for Objective Three showed no statistically significant correlation between the perceived trait emotional intelligence of middle managers and the Medicaid revenue productivity of middle manager’s direct reports with p > .05 (p = .157). In other words, the presence or lack of presence of perceived global trait emotional regulation traits in middle managers does not correlate with the Medicaid revenue productivity of the direct reports the middle managers supervise.

The descriptive statistics of most and least productive middle managers indicated that middle managers in the top 25% production bracket had lower perceived global EI scores than middle managers in the low 25% Medicaid revenue production bracket. The results suggest that middle managers with higher perceived trait emotional regulation scores such as sensitivity and the ability to recognize feelings supervise direct reports that achieve lower Medicaid revenue production. However, no statistical correlation was found between the global EI perceptions of middle managers and direct report Medicaid revenue productivity. The results further suggest no statistical correlation between the perceived trait emotional regulation traits of middle managers and the Medicaid revenue productivity achievement of direct reports.

Summary

This study assessed the relationship between perceived trait emotional intelligence of direct reports and direct report Medicaid revenue productivity as well as the relationship between perceived trait emotional intelligence of middle managers and the Medicaid revenue productivity of their direct reports. The population consisted of
178 direct report staff and 20 middle management staff with 77 direct reports (43%) and 12 middle managers (60%) completing the Trait Emotional Intelligence Questionnaire – short form. Results were reported in this chapter and discussion of conclusions and recommendations follows in Chapter V.
CHAPTER V

SUMMARY

Introduction

The preceding chapters introduced the problem statement, the purpose, research objectives, conceptual framework, and a review of the related literature, research methodology and the research findings. Chapter V will provide a summary of the findings and conclusions related to the research objectives. A discussion of the implications and recommendations for future research will conclude the chapter.

Recent research highlights the disparity between health insurance reimbursement rate payments and the cost of healthcare services (Kaufman, 2011). The research indicates that the expiration of additional subsidies to provide insurance to low-income individuals will leave low-income specific programs a top target for budget-cutting governors and legislatures (Spisak 2007). This possible cut in hospital programs could result in decline of healthcare services and consequently loss of healthcare revenue. This lack of revenue could eventually create sustainability issues for healthcare organizations and possibly decrease service options.

A review of the research illustrated that the decrease in insurance reimbursement rates are forcing healthcare organizations to take a closer look at providing a high quality service to maintain sustainability of healthcare services. By providing the highest quality service, consumer satisfaction and return business afford more opportunity for sustainable services. The research emphasizes the importance of strengthening employee relationships and consumer relationships to insure the financial integrity of organizations (Goleman & Cherniss, 2001; Watkin, 2000). The research on emotions regarding employee performance and the study of trait emotional intelligence dimensions provided insight in to its impact on organizational performance.
The review of the literature revealed an opportunity to explore the relationship between trait emotional intelligence and employee productivity in a mental healthcare facility. A community mental healthcare center (CMHC) in South Mississippi was chosen to participate in this study. Direct reports and their middle managers that provide Medicaid revenue services within a single CMHC in south Mississippi were surveyed. The survey instrument used was the Trait Emotional Intelligence Questionnaire – short form (TEIQue). The TEIQue is a self-report instrument that measures medium to large correlations with the major five-factor model including neuroticism, extraversion, openness, agreeableness, and conscientiousness (Austin, 2010). The study utilized a paper-based questionnaire for ease of completion and return. The questionnaires were distributed and a representative collected all questionnaires including completed and incomplete questionnaires from the CMHC. Demographic information was gathered from the CMHC to answer Objective One and the paper-based survey data was collected from the CMHC to answer objectives two and three.

All questionnaires were compiled and entered in to an excel spreadsheet for analysis in the Statistical Package for Social Sciences (SPSS) 22 for Macintosh. Descriptive statistics analysis was used for Objective One. Pearson’s R correlation analysis was used for research objectives two and three.

Findings, Conclusions and Recommendations

Emotional Intelligence and Experience

Findings. Although research has shown that experience correlates positively with emotional intelligence (Van Dusseldorp, Van Meijel, & Derksen, 2011), the trait emotional intelligence average of middle managers in this study was below the trait emotional intelligence average of their direct reports.
**Conclusion.** This finding suggests that both direct reports and middle managers are more likely to possess characteristics associated with emotional regulation such as the ability to manage emotions and sensitive to the emotions of others. In addition, according to Petrides (2009) these characteristics include consciousness, mental health, job satisfaction, organizational commitment, seniority, pro-social behavior, popularity, overconfidence, social desirability, and hubris.

The previous research discussed in Chapter II shows that professional experience develops soft skills which seem to correlate positively with trait emotional intelligence characteristics such as job satisfaction, organizational commitment, seniority, pro-social behavior, popularity and sensitivity (Van Dusseldorp et al., 2011). However, the results of this study do not support these findings. In fact, the results of this study indicate that employees who are in positions that require previous professional experience (middle managers) have on average lower EI scores than employees who are in positions that do not require previous professional experience. This finding suggests that direct reports within this mental healthcare center are more likely to possess sensitivity and management of job stress that is associated with higher EI scores than middle management.

Another conclusion is that the results of this study seem to indicate that employees in direct report positions might rely on and practice using trait emotional intelligence skills on a more frequent basis than middle managers. Direct reports are in positions that have direct contact with consumers and might practice the skills within trait emotional intelligence with consumers frequently than middle managers.
in administrative roles. Employees in administrative roles with administrative tasks such as budget management, employee management tasks and facility management tasks might practice interactive skills less frequently.

**Recommendations.** Middle managers should take the opportunity to engage with community members through community committee meetings and activities as well as community outreach programs. Engaging in community projects will provide opportunities for middle management to practice consumer engagement and trait emotional intelligence traits. Community projects also provide a community presence for the community healthcare center.

**Direct Report Productivity and Emotional Intelligence.**

**Findings.** The results of the study indicate no correlation between direct report productivity and trait emotional intelligence. In other words, the traits of emotional regulation such as emotion management and sensitivity found in global trait emotional intelligence do not seem to correlate or influence the productivity of direct reports. The distribution of direct report EI scores indicate that the mean EI score of direct reports who are in the top 25% of production are exactly the same on the TEIQue as the mean EI score of direct reports that are in the bottom 25% production. The findings suggest that the direct report’s productivity does not significantly correlate with their trait emotional intelligence.
Conclusion. The characteristics associated with trait emotional intelligence seem to not be a factor when revenue production is focused upon. According to Van Dusseldorp et al. (2011), the presence of soft skills in the workforce is critical however, when production and revenue are the focus in the organization, other skills and priorities might be stifled.

Although the results reveal identical trait emotional intelligence scores between the productivity of high and low direct reports, the mean trait emotional intelligence of direct reports is still higher than the global trait emotional intelligence of the male and female population norm supported in the TEIQue manual (Petrides, 2009). The results show that within the context of this community mental healthcare center, trait emotional intelligence of high producing direct reports does not manifest to a higher or lesser degree than the trait emotional intelligence of low producing direct reports.

An interesting result is the number of years direct report have been employed and the production score of direct reports. Although no statistical testing was attempted pairing the years employed of direct reports and production, the finding seems to suggest that the longer a direct report has been employed, the higher production score achievement. Therefore, this finding suggests and concludes that the traits of extraversion, consciousness, mental health, job satisfaction, organizational commitment, seniority, pro-social behavior, popularity, sensitivity, overconfidence, social desirability, and hubris do not seem to influence productivity throughout the range of respondents.

Recommendations. Community mental health centers should provide mentoring opportunities for direct reports initially at hire and periodically throughout the tenure of the direct report. Direct reports employed longer will have valuable experience to help support the new direct reports toward professional achievement.
Middle Manager Emotional Intelligence and Direct Report Productivity

Findings. These results suggest that the characteristics of global EI in middle management have no influence over the productivity of the direct reports they supervise. In other words, the traits of emotional regulation found in global trait emotional intelligence of middle managers have no correlation over the productivity of direct reports that the middle managers supervise. Although no statistical correlation was found, the mean EI scores of middle managers and their direct reports differ slightly. As discussed earlier the difference in EI scores seem to indicate that the presence of extraversion, consciousness, mental health, organizational commitment, and sensitivity appear in a slightly higher number of direct reports than in middle management. These traits of EI might be utilized more frequently in direct reports in interactions with consumers than they would with middle management with more administrative responsibilities.

Middle manager and direct report scores on the TEIQue-sf indicate that high producing middle manager’s direct reports score on average lower in global EI than the low producing middle manager’s direct reports average global EI score. The lower global EI score suggest that middle managers that supervise high producing direct report staff might be more likely to experience job stress, maladaptive coping and anxiety. However, it’s important to note that although global EI scores were lower in middle managers with higher producing direct report staff, the global EI score was still above the average population score according to Petrides (2009). These findings suggest that both middle managers and direct reports are more likely to possess global EI traits of extraversion, consciousness, mental health, job satisfaction, organizational commitment,
seniority, pro-social behavior, popularity, sensitivity, overconfidence, social desirability, and hubris.

Conclusion. The foundation of this study is the impact trait emotional intelligence has on the productivity of direct reports and middle management. A possible response to any traumatic event is the suppression of emotions identified in the study of trait emotional intelligence. Therefore, the impact of inclement weather during the February tornado compromised internal validity of this study.

Recommendations. The recommendation for this objective is to repeat this study with another group in an effort to reduce any possible internal validity threats.

Recommendations

Based on the findings and conclusions of this study, the following recommendations are presented:

CMHC Employee Mentoring

Community mental health centers should continue to provide employee support by ensuring direct reports and middle managers are provided mentoring. Job shadowing and mentoring will ensure that supportive actions are in place and soft skill development is encouraged. The focus of soft skill development encourage the practice of traits found within trait emotional intelligence important in the healthcare field (Morrison, 2008).

Team Building

Encouraging employee participation throughout the organization will encourage the practice of effective communication skills that are foundational in relationship building and soft skill development. Participation in committee organizations will provide an opportunity to engage in professional relationship building and networking. The involvement in committee organizations can also allow the employee to share in the
decision making process of the organization and create a sense of organizational ownership.

Community Engagement

Community mental healthcare centers should participate in community activities on a regular basis. Community activities not only communicate that these centers genuinely care about the well-being of the community but also actively seek to engage with the community. These activities also provide an opportunity to build the relationships with members of the community that are essential for community mental healthcare success.

Continuing Education

The mental health organization should provide continuing education opportunities sponsored both within and outside the organization. Continuing education will encourage employee growth and professional development and strengthen the organization/employee relationship. Continuing education opportunities sponsored outside of the employee’s organization allow for an expansion of a social support network which can enhance EI skills (Freshman & Rubino, 2004).

Discussion

This study seeks to explore the relationship between trait emotional intelligence and employee productivity as measured by Medicaid revenue. Both direct reports and middle manager mean EI scores were higher on the TEIQue than the mean score for the TEIQue instrument according to Petrides (2009). Both direct reports and middle managers seem more likely to possess traits associated with higher EI such as consciousness, mental health, job satisfaction, organizational commitment, seniority, pro-social behavior, popularity, sensitivity, overconfidence, social desirability, and hubris.
(Petrides, 2009) than individuals in the general population. The results of this study seem consistent with research studies regarding experience and increased emotional intelligence found in Chapter II. It is recommended that community mental health centers provide leadership and team building activities to support soft skill practice and continued development for middle managers. It is also recommended that middle managers engage with community members through community outreach.

Trait emotional intelligence scores of direct reports and the trait emotional intelligence of middle managers did not seem to correlate with direct report productivity. These results are inconsistent with a majority of literature reviewed in Chapter II. However, the characteristics of consciousness, mental health, job satisfaction, organizational commitment, seniority, pro-social behavior, popularity, sensitivity, overconfidence, social desirability, and hubris in direct reports and middle management still seem to be present to a higher degree than the population norm. The results also seem to suggest that employees who are in positions that engage with consumers on a regular basis tend to score higher on global trait emotional intelligence than middle managers. This might be due to middle manager responsibilities of completing administrative duties as opposed to the opportunity of practicing EI traits while engaging with consumers. It is recommended that middle managers provide mentoring opportunities to direct reports to support direct report and middle managers soft skills and trait emotional intelligence development. It is also recommended that community mental health centers continue to encourage participation in continuing education opportunities that provide peer and best practices support.
Recommendations for Future Research

Based on the study findings, the following recommendations are offered for future research:

1. Replicate this study comparing trait emotional intelligence and production of employees from community mental healthcare centers around the state of Mississippi.

2. Compare trait emotional intelligence data within and outside the context of the workplace to determine similarities and differences in scores. Although the results of this study indicate no correlation between trait emotional intelligence and direct report productivity, the results for trait emotional intelligence might be different outside of this setting.

3. Replicate this study comparing trait emotional intelligence to treatment efficacy and consumer compliance in a community mental healthcare center.

4. Conduct a mixed methods analysis study by collecting both quantitative trait emotional intelligence survey data as well as qualitative trait emotional intelligence data with employee interviews. Use the findings of both methods and compare those results to production data.

Limitations

Several limitations exist in this study. This study is limited to direct reports and their middle managers that provide Medicaid revenue services within a single community mental healthcare facility in south Mississippi. This study compared the results of global trait emotional intelligence to Medicaid production of direct reports and middle managers within a single community mental healthcare center. Caution should be exercised to generalize findings to community mental healthcare centers beyond the scope of this
study. In addition, the population of middle managers was low (n = 20), so consequently the response rate, although adequate at 60%, resulted in a low number of participants.

The community healthcare center participating in this study suffered from a tornado in February of 2013 destroying offices in South Mississippi and impacting the service population within the area. Some direct reports and middle managers had difficulty finding meeting space for consumers and experienced consumer relocation that negatively affected production. Staff relocation and turnover was also a source of concern. Global EI and production data were collected after the storm and therefore includes post-storm production data. Therefore, production data collected during the year of this study might be inconsistent with other time frames.

Conclusion

The soft skills associated with trait emotional intelligence are critical to any employee who works in the healthcare field. Although healthcare is an industry that will always be a necessity, ultimately consumers will always have a choice on where they go to receive those services. Businesses that provide services to consumers must be able to meet the needs of their consumer base and also earn the recommendations of consumers to encourage growth. The need for sustainability and growth renders it necessary for employees to attain and cultivate the soft skills associated with trait emotional intelligence.

This study presents a comparison of global trait emotional intelligence and productivity within a community mental healthcare facility. The findings in this study suggest that there is a gap in production within direct reports and middle managers. Contrary to much of the literature, although there is a gap in production within direct report staff there is no statistically significant correlation within this study between global
trait emotional intelligence and production. These findings concur with the high prioritization of productivity as the stress of healthcare reform and pressure to sustain healthcare services with fewer financial resources (Goldberg & Petasnick, 2008). Until healthcare services are financially stable the pressure for healthcare employees to perform will continue and the cost of productivity will be consumer neglect.

Professional experience allows for the development of skills that are necessary for professional success; however, in positions of healthcare management, emotions might be purposefully stifled within the workplace. The unique stressors associated with healthcare reform can possibly jade healthcare workers and put more pressure on productivity management and less on building relationships. The stress of productivity can result in a less consumer focused and less efficient workplace.

The results of this study reveal that the traits within emotional intelligence are present in healthcare employees to a higher degree than the general population. Within the context of the healthcare workplace, the characteristics associated with trait emotional intelligence might hinder productivity. Encouraging the building of relationships with consumers takes time that might create a less efficient healthcare employee and consequently a less efficient healthcare manager. The balance of trait emotional intelligence and productivity within healthcare is tricky and the compromise can potentially encourage a less personable healthcare employee if productivity is the biggest concern.

This research lays the foundation for community mental health centers to take a proactive approach to a changing healthcare industry landscape. Healthcare organizations and employees must be able to balance production efforts with meeting the needs of the consumers. The soft skills within trait emotional intelligence in this study
provide a framework of employee qualities that previous research has shown to be effective in employee and leadership production.

Although the findings from this research suggest that less value might be placed on trait emotional intelligence as it relates to productivity, the value of meeting consumer needs cannot be understated. Healthcare organizations and employees are in the business of improving the health of consumers. While providing exceptional healthcare services might initially attract consumers, it is the service that employees provide that keep consumers coming back.
# APPENDIX A

## TEIQue-SF

*Instructions:* Please answer each statement below by putting a circle around the number that best reflects your degree of agreement or disagreement with that statement. Do not think too long about the exact meaning of the statements. Work quickly and try to answer as accurately as possible. There are no right or wrong answers. There are seven possible responses to each statement ranging from ‘Completely Disagree’ (number 1) to ‘Completely Agree’ (number 7).

<table>
<thead>
<tr>
<th></th>
<th>Completely Disagree</th>
<th></th>
<th>Completely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Expressing my emotions is not a problem for me</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I often find it difficult to see things from another person’s viewpoint.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>On the whole, I’m a highly motivated person.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I usually find it difficult to regulate my emotions.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I generally don’t find life enjoyable.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I can deal effectively with people.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I tend to change my mind frequently.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Many times, I can’t figure out what emotion I’m feeling.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I feel that I have a number of good qualities.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>I often find it difficult to stand up for my rights.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I’m usually able to influence the way other people feel.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>On the whole, I have a gloomy perspective on most things.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Those close to me often complain that I don’t treat them right.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>I often find it difficult to adjust my life according to the circumstances.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>On the whole, I’m able to deal with stress.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>I often find it difficult to show my affection to those close to me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>I’m normally able to “get into someone’s shoes” and experience their emotions.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>I normally find it difficult to keep myself motivated.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>I’m usually able to find ways to control my emotions when I want to.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>On the whole, I’m pleased with my life.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>I would describe myself as a good negotiator.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>I tend to get involved in things I later wish I could get out of.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>I often pause and think about my feelings.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>I believe I’m full of personal strengths.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>I tend to “back down” even if I know I’m right.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>I don’t seem to have any power at all over other people’s feelings.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>I generally believe that things will work out fine in my life.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>I find it difficult to bond well even with those close to me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Generally, I’m able to adapt to new environments.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Others admire me for being relaxed.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
August 23, 2012

Mr. Chris Fox
13504 Schroeder Rd
Apt #4205
Houston, TX 77070

Dear Chris:

This letter confirms the willingness of Pine Belt Mental Healthcare Resources (PBMHRC) to participate in the study of Emotional Intelligence and Medicaid production. PBMHRC will provide production report data which will include a 12 month production report for Community Support Specialists, Clinicians, Day Treatment Specialists and administrative staff who have worked in the same 12 month period at PBMHRC. The report will include the professional identification codes of staff to ensure confidentiality.

PBMHRC will also allow survey data to be distributed and collected from the above mentioned staff using the Trait Emotional Intelligence Questionnaire-short form.

If you have any questions, please contact me at michelledaniels@pbmhr.com or call 601.264.2111.

Best regards,

Michelle Daniels
Director of Human Resources

cc: Personnel File
APPENDIX C

AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT

THE UNIVERSITY OF SOUTHERN MISSISSIPPI AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT
(Short Form - to be used with oral presentation)

Participant’s Name _____________________________

*Emotional Intelligence and Community Mental Healthcare Productivity*

All procedures and/or investigations to be followed and their purpose, including any experimental procedures, were explained by _______________________. Information was given about all benefits, risks, inconveniences, or discomforts that might be expected. Specifically, participation in this study poses no known risks or hazards.

The opportunity to ask questions regarding the research and procedures was given. Participation in the project is completely voluntary, and participants may withdraw at any time without penalty, prejudice, or loss of benefits. All personal information is strictly confidential, and no names will be disclosed. Any new information that develops during the project will be provided if that information may affect the willingness to continue participation in the project.

This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS, 39406-0001, (601) 266-6820 and/or Christopher Fox (601) 307-6456. Participants will be given a copy of the consent documentation for their records.

____________________________________________  ________________
Signature of participant  Date
APPENDIX D

AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT

ORAL PRESENTATION

Consent is hereby given to participate in the study titled:
Emotional Intelligence and Community Mental Healthcare Productivity

Purpose:
The purpose of this study is to explore the relationship between Emotional Intelligence and employee or direct report productivity as measured by Medicaid revenue in a Community Mental Healthcare Center (CMHC) in South Mississippi.

Description of the study:
During the data collection phase the researcher will gather demographic, Medicaid production data and emotional intelligence data of direct reports and middle management staff.

Participants are asked to complete the Trait Emotional Intelligence Questionnaire and place the questionnaire in the provided manila envelope. Middle managers are instructed to return all surveys to the HR liaison within one week.

Benefits:
There will be no specific benefits from participating in this study.

Risks:
Participation in this study poses no known risks or hazards.

Confidentiality:
Anonymity of participants will be maintained using employee professional codes. The only individual that will have access to the data is the researcher and questionnaires will be destroyed following analysis of data.

Participant’s assurance:
This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS, 39406-0001, (601) 266-6820 and/or Christopher Fox (601) 307-6456. Participants will be given a copy of the consent documentation for their records.

____________________________________  ___________________
Signature of Person Giving Oral Presentation           Date
APPENDIX E

PRELIMINARY NOTIFICATION EMAIL

One of our former employees Christopher Fox is a doctoral candidate at the University of Southern Mississippi. Chris’s research focuses on emotional intelligence and productivity in Community Mental Healthcare. Chris is seeking your help in completing a 7-minute survey regarding emotional intelligence.

The study of emotional intelligence and its impact on productivity within the field of mental healthcare is rare and you can help change this by participating in this study. In the next two weeks you will be receiving the Trait Emotional Intelligence Questionnaire – short form or TEIQue-sf. The questionnaire will take approximately 7 minutes to complete and participation is voluntary. You and applicable staff members will be asked to complete the questionnaire. All questions are confidential and your identity will remain anonymous.

The TEIQue-sf will be forwarded to you from Human Resources in the next two weeks. Upon completion you will be asked to return all the questionnaires to the Human Resources department Box 116.

If you have any questions regarding the study please contact Christopher Fox at 601-307-6456 or christopher.fox@eagles.usm.edu.
APPENDIX F

FOLLOW UP EMAIL

One of our former employees Christopher Fox is a doctoral candidate at the University of Southern Mississippi. Chris’s research focuses on emotional intelligence and productivity in Community Mental Healthcare. Chris is seeking your help in completing a 7-minute survey regarding emotional intelligence.

The questionnaire you received 2 weeks ago is the Trait Emotional Intelligence Questionnaire short form. This questionnaire takes approximately 7 minutes to complete and is voluntary. Your contribution to the research of trait emotional intelligence and community mental healthcare is extremely important and will be greatly appreciated.

Please forward your completed and incomplete questionnaires to the human resources office in the next week. If you have any questions regarding the study please contact Christopher Fox at 601-307-6456 or christopher.fox@eagles.usm.edu.
APPENDIX G

IRB APPROVAL LETTER

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

INSTITUTIONAL REVIEW BOARD
118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.6820 | Fax: 601.266.4377 | www.usm.edu/irb

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the “Adverse Effect Report Form”.
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 13042902
PROJECT TITLE: Emotional Intelligence and Community Mental Healthcare Productivity
PROJECT TYPE: Dissertation
RESEARCHER(S): Christopher Fox
COLLEGE/DIVISION: College of Science & Technology
DEPARTMENT: Human Capital Development
FUNDING AGENCY/SPONSOR: Pine Belt Mental Healthcare Resources
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 05/14/2013 to 05/13/2014

Lawrence A. Hosman, Ph.D.

Institutional Review Board
REFERENCES


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