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Dentists as Clinician Managers: Leadership Influences on Dental Team Empowerment and Engagement

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Abstract

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Scott H. Craven

MA, University of Phoenix, 2012

DDS, Creighton University, 1996

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Dissertation Submitted in Partial Fulfillment

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Abstract

Leadership training is virtually nonexistent for dental students, and practicing dentists rarely engage in any form of leadership development, relying primarily on mentoring by senior colleagues and on-the-job experiences. Dentists serve in a hybrid role as clinicians and managers to provide quality dental care and establish a profitable business, respectively. This quantitative study investigated the ways in which the emotional intelligence (EI) and leadership styles of 16 dentist clinician managers (DCMs) affected their dental teams. Specifically, the effects of leadership style and EI of DCMs on individual psychological empowerment (PE), team PE, and employee engagement were explored. Team PE effects on individual PE and employee engagement also were assessed. A multiple regression analysis and a correlational analysis were conducted to examine the effects of leadership style and EI on team and individual levels of PE and employee engagement of various groupings of dental teams in the Utah region. The results showed positive and significant predictive relationships between servant leadership style, transformational leadership style, and team PE and the dependent variables (DVs). DCM EI, transactional leadership style, and laissez-faire leadership style did not significantly contribute to predicting the DV outcomes. The results add to the limited amount of available research on the clinician manager model used extensively in the dental industry. The study also identified leadership styles that might be more conducive to clinician management, and it showed whether the clinician manager model is a viable model in the health care industry.

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Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Introduction

Effective leadership is crucial to employee engagement and organizational success (Raja, 2012; Vinarski-Peretz & Carmeli, 2011; Zhang & Bartol, 2010). Consequently, organizations in many business sectors have devoted significant resources to leadership development (Taichman et al., 2012). However, the health care industry has placed little emphasis on the leadership development of health care professionals, who are frequently required to lead health care teams as clinician managers and who often must rely on an unpredictable apprenticeship model (Fruge, Mahoney, Poplack, & Horowitz, 2010).

Forbes, Hallier, and Kelly (2004) determined that sophisticated leadership skills, attitudes, and abilities are necessary to navigate the clinician manager role successfully. Clinician managers have been trained to provide clinical expertise in the health care setting, but they subsequently have been required to assume management responsibilities. In their qualitative study, Forbes et al. showed that physicians who were invested in management roles or who were reluctantly compelled to lead usually had insufficient management mentoring or training prior to adopting the clinician manager role. Fulop (2012) asserted that clinician managers do not fit into the traditional leadership theories and that leadership education among doctors is rare. He further suggested that the role of leadership development among clinician managers is an underresearched area.

Effective leadership in organizations has been shown to improve psychological empowerment (PE) and engagement among employees (Avolio, Zhu, Koh, & Bhatia,

2004; Babcock-Roberson & Strickland, 2010). Specifically, Avolio et al. (2004) surveyed 520 nurses in a hospital setting in Singapore and found that transformational leadership had a direct positive correlation with organizational commitment and was mediated by individual PE. Hayati, Charkhabi, and Naami (2014) also stated that "dimensions of transformational leadership have significant relationships with diverse components of work engagement" (p. 4). Similarly, Lashcinger and Finegan (2005) assessed nurses working in the hospital setting and found a significant correlation between empowering leadership strategies and employee engagement at work.

Although research has indicated that transactional and transformational styles are important in clinician manager leadership, some researchers (e.g., Fulop, 2012; Fulop & Day, 2010) have found that a hybrid style of leadership might be the most effective in the health care setting. This hybrid style of leadership emphasizes the need for strong individual leader characteristics as well as the ability to engage others in the leadership process (Fulop, 2012). As Fulop (2012) suggested, a critical balance exists between developing the characteristics of the heroic type of leadership, meaning supporting and developing leaders' personal skills and attributes, with a postheroic distributive style of leadership.

Goleman and Boyatzis (2008) claimed that emotional intelligence (EI) is synonymous with effective leadership. However, Harms and Crede (2010), in a meta-analysis of various EI instruments, found that EI did not have as strong a correlation with transformational leadership characteristics. Although they did find moderate correlations, they did not rule out the possibility of EI having some influence on transformational

leadership style. Regardless, research has shown that EI has been influential in leadership effectiveness in areas such as developing collective organizational goals and objectives; instilling in others an appreciation of the importance of work; developing a culture of enthusiasm, confidence, trust, and cooperation; and establishing a meaningful identity for the organization (George, 2000).

Background

Clinicians who maintain positions as the leaders, directors, managers, or heads of clinical teams while continuing in professional health care practices, such as doctors, nurses, dentists, and other health care professionals, are considered clinician managers (Fulop & Day, 2010). Many professionals function in this role by virtue of their professional training, not because of business management and leadership expertise. In these cases, they either willingly embrace the role or reluctantly accept the position thrust upon them by organizational leadership (Fulop, 2012). Dentists are no exception: Most leave dental school with little business training but are expected to run profitable dental businesses and lead dental teams (Taichman et al., 2012).

In 2013, approximately 190,000 dentists were practicing in the United States (National Center for Health Statistics, 2013). This number has been projected to grow by 16% by 2022 (U. S. Bureau of Labor Statistics, 2015). Some dentists work as solo practitioners who provide dental services in small practice settings; others work in group- or corporate-owned practice settings (Watson, 2012). To various degrees, dentists are expected to lead dental team members and manage their business operations (Chilcutt,

2009). This dual role requires that dentists focus on providing dental care for patients while maintaining profitable businesses (Kippist & Fitzgerald, 2009).

Dentistry, as a health care profession, does not make a concerted effort at the dental school educational level or with subsequent postgraduate training or continuing education to develop dentists' leadership skills and knowledge (Taichman et al., 2012). Ironically, the American Dental Association's Commission on Dental Accreditation (CODA, 2017) stated that one of the expected outcomes for dental school graduates is to have a working knowledge of basic management principles and possess the management skills needed to lead dental teams. The CODA-mandated requirement is not met in most dental schools, which leaves most dentists unprepared to take on leadership or managerial roles (Victoroff, Schneider, & Perry, 2009).

Rarely will dentists pursue formal training in leadership or management skills; instead, they usually acquire them through trial and error, such as by copying mentors' leadership styles and/or attending professional conferences (Chilcutt, 2009; Fruge et al., 2010; Taichman et al., 2012). The question remains whether or not this ad hoc method is effective (Victoroff et al., 2009). Despite the need for formal training, Taichman et al. (2012) concluded that even with dental students' willingness and desire to participate in a leadership-focused curriculum, stand-alone leadership training in most dental institutions is an unexplored opportunity. It is likely that many dentists are unaware of their particular leadership styles and their effect on dental teams, which could negatively affect employees' attitudes, engagement, and empowerment (Oreg & Berson, 2011).

Given the disparity seen in dentist leadership development, and in light of the apparent complexity of the clinician manager role, it is questionable that dentist leaders have been navigating this role effectively (Kippist & Fitzgerald, 2009). The literature has been silent on this matter. One of the few studies specifically researching leadership influences on dental teams established that further research is needed in this area (Chilcutt, 2009). Chilcutt (2009) found that dentists are the most effective as leaders when they adopt a participative and proactive leadership style that includes team members in the decision-making process, fosters collaboration, and encourages healthy confrontation as a form of conflict management.

Clinician management is a challenge in the dental industry that could affect not only stress levels among dentists, which is reportedly high, but also the ways in which dental teams experience their working environment (Jameson, 2010; Rada & Johnson-Leong, 2004). Both of these factors relate to the quality of patient care and patients' experience in the practice (Lunn, 2008). It also appears that dentists might be confused about their role in dental teams (Chilcutt, 2009). According to Chilcutt (2009), four of 10 dentists interviewed did not consider themselves the leaders of the dental teams, but just other members of the teams. For dental team members, this ambiguity in leadership caused by an ineffective attempt at the clinician manager role could result in organizational challenges (Kippist & Fitzgerald, 2009).

Lack of effective leadership and/or the desire to manage dental practices among dentists might be a key contributor to the emergence of corporate-led dentistry in the United States (Watson, 2012). In fact, Watson (2012) indicated that more than 800 dental

practices were owned by corporate entities and that more than 3,000 dentists were employed by those agencies. Watson postulated that by 2032, the notion of the solo practice might be outdated. Although there has been considerable debate about the appropriateness of corporate-driven dentistry, business leadership and management support seem to be a needed outcome from this evolutionary process in dentistry (Watson, 2012).

Statement of the Problem

As previously described, dentists fit the mold of clinician manager. Often, dentist clinician managers (DCMs) find themselves in situations where, although they have been trained thoroughly to do dentistry, they must manage, lead, and finance businesses for which they have had very little training (Taichman et al., 2012). A shift in the dental industry has occurred that might be related to this alleged lack of preparedness as DCMs. Large multiunit dental groups and corporate dentistry are growing trends in the United States (Guay, Wall, Petersen, & Lazar, 2012). As such, Guay et al. (2012) contended that management support is much more prevalent than with the historical solo practitioner who manages the practice alone. Even then, Guay et al. suggested that most dental practitioners are expected to manage not only a clinical team but also the business support staff. Solomon (2012) referred to dental team as dentists; dental hygienists; dental assistants; and other personnel, including secretaries, receptionists, financial coordinators, office managers, and sterilization assistants. Therefore, when considering the composition of dental teams, it necessarily includes all employees of dental practices.

Traditionally, dentists have taken on the challenging role of DCM, as described in

recent literature (Kippist & Fitzgerald, 2009). This dual role requires that dentists focus on providing quality dental care while also focusing on the leadership and management issues that occur in dental practices (Fulop, 2012). After studying clinician managers in the medical profession, Kippist and Fitzgerald (2009) concluded that this dual role model might not be the most effective model for health care organizations. Based on their study of 14 physician clinician managers in various hospital settings, they concluded that their clinical duties either were offloaded to other clinical personnel or the clinician managers neglected managerial duties. Yet, this is precisely the model used by many dentist practitioners today (Watson, 2012).

According to Kippist and Fitzgerald (2009), although the dual role of clinician manager might be a source of interpersonal or group conflict within the organization, it has not been empirically researched in the literature. Navigating the complexities of the clinician manager role requires sophisticated leadership and managerial skills, and as seen by Forbes et al. (2004), might require clinicians to choose one role over the other. Fulop (2012) asserted that the current leadership theories in use have not adequately addressed the leadership dynamics of the clinician manager role. Therefore, the first key problem investigated in this study was to determine whether there was, or is not, a viable leadership theoretical model or style that aligned with the dynamic needs of dentists as clinician managers in managing dental practices and leading dental teams.

Second, it often has been stated that EI is requisite for effective leadership (George, 2000; Ingram & Cangemi, 2012; Palmer, Walls, Burgess, & Stough, 2001). McCallin and Bamford (2007) claimed that health care professionals must be socially

competent and able to engage in building teams that are collectively responsible and accountable for their actions. Increased leadership awareness and EI levels might help dentists to be better leaders (Palmer et al., 2001). Dentists who are aware of emotions and can act appropriately to personal and others' emotions in an environment often charged with emotion will likely make decisions important to dental practice management that will strengthen the organizations (Newman, Joseph, & MacCann, 2010).

Given the unique circumstances relating to clinician management, it has been unclear whether leadership style and EI are important factors in the successful management of dental teams. As stated by Kippist and Fitzgerald (2009), the dual role nature of clinician managers might not be the best model for dentists to adopt. However, in many cases, dentists are forced to engage in the dual role of clinician management. Therefore, if there is a leadership style that best suits DCMs, and if EI has a significant effect on dentist leadership, obtaining a better understanding of these variables can help practicing dentists and dental teams.

Purpose of Study

The intent of this study was to understand whether DCM leadership style and EI mattered in the operation of dental practices and to explore the DCM role. Because the majority of dentists continue to function in the role of clinician manager, more information is needed to determine whether this model of leadership and management is effective in the dental practice environment. Relative to the clinician manager model, determining the effective and ineffective leadership styles of dentists through original research will further the knowledge base in leadership theory and team dynamics, and

will further the literature on clinician manager research, which has been primarily studied among physicians and nurses in the hospital setting. Therefore, I conducted this study to determine whether specific leadership styles and EI characteristics were more conducive to the dual role. I sought to determine whether leadership style and/or EI among a sample of DCMs could predict team PE, individual PE, and employee engagement. I also wanted to know whether team PE could predict individual PE and employee engagement.

Nature of the Study

I conducted this quantitative study featuring a multiple regression (MR) analysis of dentist leadership style, EI, team PE, individual PE, and employee engagement among various dental teams throughout the Utah region to further the research in leadership and EI theory relevant to clinician managers. I selected a purposive sample of dentists and their respective dental team cohorts from the target population of the study. I further assessed the DCMs for EI, and I assessed the team members for team PE, individual PE, and employee engagement. I gathered data using two assessments that I then used in the MR analysis to examine the relationships of these variables both within dental teams and between groups.

I assessed dentist leadership style using the Multifactor Leadership Questionnaire (MLQ), which has been shown to be effective in assessing transformational, transactional, and laissez-faire/passive styles of leadership (Avolio & Bass, 2014). In addition, I assessed servant leadership style using the Servant Leadership Scale (SLS), which has been effective in assessing servant leadership style (Liden, Wayne, Zhao, & Henderson, 2008). EI has been assessed effectively using validated instruments such as

the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer, Salovey, Caruso, & Sitarenios, 2003). Team PE has been assessed effectively using validated instruments such as the 12-item Global Psychological Empowerment Scale (GPES), developed by Kirkman, Rosen, Tesluk, and Gibson (2004). Individual PE has been assessed effectively using validated instruments such as the Spreitzer Psychological Empowerment Scale (SPES), developed by Spreitzer in 1995. Employee engagement has been assessed effectively using validated instruments such as the Utrecht Work Engagement Scale (UWES; Schaufeli, Bakker, & Salanova, 2006; Seppälä et al., 2008).

MR analyses were used to determine whether DCM leadership style and EI could predict team PE, individual PE, and employee engagement (see Figure 1). Additional MR analyses were used to determine whether team PE could predict individual PE and employee engagement. A bivariate correlation was used to analyze the relationship between leadership style and EI using SPSS. The Pearson correlation coefficient generated from this analysis provided the strength of the relationship between leadership style and EI. Figure 2 depicts the nature of the nonuniform dental team sample in the study.

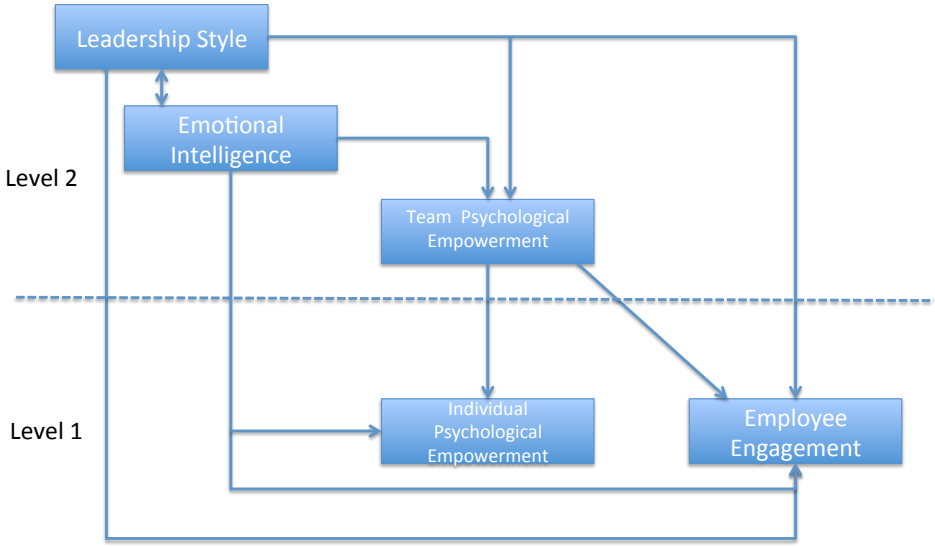

Figure 1. MR research variables: leadership style, EI, team PE, individual PE, and employee engagement.

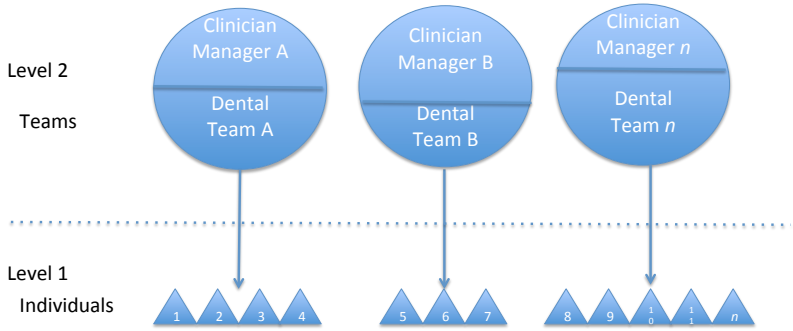

Figure 2. Diagram of unbalanced dental team groupings.

Research Questions and Hypotheses

The following research questions (RQs) and associated hypotheses guided the quantitative study:

RQ1: Does DCM leadership style predict team PE?

H_{01a}: Transformational leadership style does not predict team PE.

H_{a1a}: Transformational leadership style predicts team PE.

H_{01b}: Transactional leadership style does not predict team PE.

H_{a1b}: Transactional leadership style predicts team PE.

H_{01c}: Laissez-faire leadership style does not predict team PE.

H_{a1c}: Laissez-faire leadership style predicts team PE.

H_{01d}: Servant leadership style does not predict team PE.

H_{a1d}: Servant leadership style predicts team PE.

RQ2: Does DCM leadership style predict individual PE?

H_{02a}: Transformational leadership style does not predict individual PE.

H_{a2a}: Transformational leadership style predicts individual PE.

H_{02b}: Transactional leadership style does not predict individual PE.

H_{a2b}: Transactional leadership style predicts individual PE.

H_{02c}: Laissez-faire leadership style does not predict individual PE.

H_{a2c}: Laissez-faire leadership style predicts individual PE.

H_{02d}: Servant leadership style does not predict individual PE.

H_{a2d}: Servant leadership style predicts individual PE.

RQ3: Does DCM leadership style predict employee engagement?

H_{03a}: Transformational leadership style does not predict employee engagement.

H_{a3a}: Transformational leadership style predicts employee engagement.

H_{03b}: Transactional leadership style does not predict employee engagement.

H_{a3b}: Transactional leadership style predicts employee engagement.

H_{03c}: Laissez-faire leadership style does not predict employee engagement.

H_{a3c}: Laissez-faire leadership style predicts employee engagement.

H_{03d}: Servant leadership style does not predict employee engagement.

H_{a3d}: Servant leadership style predicts employee engagement.

RQ4: Does DCM EI predict team PE, individual PE, or employee engagement?

H_{04a}: DCM EI does not predict team PE.

H_{a4a}: DCM EI predicts team PE.

H_{04b}: DCM EI does not predict individual PE.

H_{a4b}: DCM EI predicts individual PE.

H_{04c}: DCM EI does not predict employee engagement.

H_{a4c}: DCM EI predicts employee engagement.

RQ5: Does team PE predict individual PE and/or employee engagement?

H_{05a}: Team PE does not predict individual PE.

H_{a5a}: Team PE predicts individual PE.

H_{05b}: Team PE does not predict employee engagement.

H_{a5b}: Team PE predicts employee engagement.

RQ6: Does DCM EI correlate with their leadership style?

H_{06a}: DCM EI does not correlate with transformational leadership style.

H_{a6a}: DCM EI correlates positively with transformational leadership style.

H_{06b}: DCM EI does not correlate with servant leadership style.

H_{a6b}: DCM EI correlates positively with servant leadership style

H_{06c}: DCM EI does not correlate with transactional leadership style.

H_{a6c}: DCM EI correlates negatively with transactional leadership style.

H_{06d}: DCM EI does not correlate with laissez-faire leadership style.

H_{a6d}: DCM EI correlates negatively with laissez-faire leadership style.

Theoretical Framework

The framework of this study was based on leadership theory and EI theory. Specific to leadership theory, I discuss transactional, transformational, laissez-faire, situational, and servant leadership theories in this section. Empowerment theory and engagement theory also are discussed.

Leadership Theory

Historically, leadership has been tied to many theoretical bases (McCleskey, 2014), with transformational, transactional, laissez-faire, and servant leadership theories being highly researched topics (Avolio et al., 2004; Bass, 1990; Spears, 2010). Transformational leadership theory emphasizes cooperation and collective unity, meaning that leaders rely on charisma, motivation, and inspiration to encourage employee engagement and high task performance (Avolio et al., 2004). It also proposes that workers are more likely to be led by and be engaged in their work if they perceive their leaders as charismatic, motivational, and inspiring individuals who ascribe to a participative style of decision making within the organization (Avolio et al., 2004). Transformational leadership theory has application in leader-member exchange (LMX) theory as well as social exchange theory, in which employees are motivated by the perceived exchange occurring between leaders and employees (Wayne, 2013). Wayne (2013) explained that the relationship between leaders and followers is based on the type

of exchange occurring: Positively perceived relationships with leaders result in higher levels of performance, commitment, and trust.

Basic human behavioral responses, as described by behavioral psychologists Pavlov and Skinner (as cited in Bass, 1990), drive transactional leadership theory, which centers on rewards and punishments. Transactional leadership theory proposes that leaders motivate workers with task orientation and reward those who perform their tasks effectively and efficiently (Bono & Judge, 2004). When tasks are not completed as desired, transactional leaders might invoke punishments as a motivator to do the task correctly (Atwater, Camobreco, Dionne, Avolio, & Lau, 1997). Transactional leadership relies heavily on extrinsic motivational factors (Bass, 1990).

Laissez-faire leadership represents an avoidant type of leadership that is characterized by an aversion to provide influence or give directions to or correct subordinates (Chou, 2012). This leadership style provides high levels of autonomy for employees and greater social cohesion among teams (Raes et al., 2013), but it also increases leadership role ambiguity (de Villiers & Stander, 2011) and diminishes concern about completing job tasks effectively (Schilling, 2009). This theory proposes that leaders believe that employees know best how to do their jobs and that they can succeed best if left on their own. It also suggests that leaders might be hesitant to exert influence for fear of losing favor among followers (Goodnight, 2004).

Servant leadership theory suggests that the most effective leadership begins from a framework of serving those who are led and focuses on variables that help organizations and individual employees (Parris & Peachey, 2012) by defining the leader

as servant first (Spears, 2010). This theory proposes that workers are motivated by and follow their leaders out of respect and admiration and that they can recognize the leaders' belief in their abilities to accomplish job tasks, which is highly motivating. It is through service, stewardship, and belief in the ability of individual growth that leaders and followers are motivated (Spears, 2010).

Contingent leadership theory describes the idea that leaders must adapt to the needs or abilities of the followers and the organizational environment (McCleskey, 2014; Vroom & Jago, 2007). Pure situational theorists postulate that the environment or situation within the organization is more important than any one leadership style or strategy. However, Vroom and Jago (2007) suggested that most social scientists have abandoned the debate between leader qualities versus situational dynamics and have adopted models that account for both variables in leadership.

Team Dynamics

Team or group dynamics have a basis in social cognitive theory (Bandura, 1989). This theory proposes that social factors influence the self-regulative processes in individuals and impact thought, affect, motivation, and action. Cronin, Weingart, and Todorova (2011) described teams as dynamic group entities comprising individuals who collectively form a group dynamic affected by internal and external influences. Choi (2009) suggested that many of the mediating factors predicting individual performance dynamics, such as organizational citizenship behaviors (OCBs), also might predict group behaviors, as described in multilevel theory (Rousseau, 1985). In other words, many factors leading to improved individual OCBs also similarly affect collective group OCBs.

Tuuli and Rowlinson (2009a) found that team empowerment has a positive effect on individual empowerment because of the empowerment climate established by the team. Thus, employees within an already engaged and empowered team are more likely to feel engaged and empowered individually, emphasizing the importance of team dynamics.

Emotional Intelligence Theory

EI theory proposes that individuals have the ability to monitor personal feelings and emotions as well as those of others and use that information to guide their own thinking and actions. It is the ability to process emotionally laden information competently that guides cognitive activities such as problem solving and choosing the necessary behavioral responses to given situations (Salovey, Mayer, Caruso, & Yoo, 2008). A primary consideration or belief in EI theory is that emotions affect cognition, so understanding one's own emotions as well as the emotions of others will help to regulate thoughts and behaviors (George, 2000).

Psychological Empowerment

Empowerment theory postulates that individuals and groups can experience various levels of control over their lives or circumstances (Zimmerman, Israel, Schulz, & Checkoway, 1992). PE in the workplace refers to the level of intrinsic motivation toward one's work role in four cognitive areas: meaning, competence, self-determination, and impact (Zhu, Sosik, Riggio, & Yang, 2012). It is a process of developing a sense of self-efficacy in job tasks and responsibilities (Zhang & Bartol, 2010). PE has been cited in the literature as a factor in individual as well as team workplace dynamics (Tuuli & Rowlinson, 2009a) correlating strongly with high performance, social support, job

satisfaction, leadership, organizational commitment, organizational citizenship, and work characteristics (Huang, Iun, Liu, & Gong, 2009; Seibert, Wang, & Courtright, 2011).

Team dynamics show that PE is a factor for team performance, team goal setting, and team identity (Lee & Wei, 2011), and is an isomorphic construct that maintains the same basic meaning across levels (Tuuli & Rowlinson, 2009a). Therefore, as seen in Tuuli and Rowlinson's (2009a) multilevel analysis of project management teams, definitions and manifestations of PE express similarly, whether on the individual or the team level. When studying groups or teams, the members of teams will have a collective belief regarding authority and autonomy over their work and that their collective effort is meaningful and can impact organizational outcomes. Tuuli and Rowlinson suggested that simply establishing a climate of empowerment can mediate individual PE and other performance behaviors.

Individuals with high levels of PE believe that their work is meaningful and important to their respective organizations, they are able to perform the work or job tasks, they have some freedom or autonomy in carrying out given tasks or assignments, and their contributions make a difference in work outcomes (Tuuli & Rowlinson, 2009b). In addition, Tuuli and Rowlinson (2009b) stated that some of the consequences of PE include the manifestation of positive task and contextual behaviors that is partially mediated by the opportunity or ability to perform and the employees' level of intrinsic motivation. When studying groups or teams, members of the teams will have a collective belief regarding authority and autonomy over their work and will believe that their collective effort is meaningful and impacts organizational outcomes (Chen, Sharma,

Edinger, Shapiro, & Farh, 2011).

Employee Engagement

Work engagement is a "positive, fulfilling, work-related state of mind that is characterized by vigor, dedication and absorption" (González-Romá, Schaufeli, Bakker, & Lloret, 2006) p. 166). According to Saks (2006), employee engagement is "a distinct and unique construct consisting of cognitive, emotional, and behavioral components associated with individual role performance" (p. 602). Kahn (1990), who provided a theoretical framework for employee engagement and identified several antecedents and consequences of employee engagement in the workplace, described the antecedents of employee engagement as psychological meaningfulness, psychological safety, and psychological availability. Consequences of employee engagement are enhanced job performance, job satisfaction, job involvement, intrinsic motivation, organizational commitment, and improved organizational citizenship (Rich, Lepine, & Crawford, 2010). Engaged workers have greater determination and are willing to apply discretionary effort to their work (Pitt-Catsouphes & Matz-Costa, 2008).

Conceptual Framework

The conceptual framework of the study was based on the phenomenon of clinician management and served as the focus of the study. Clinician management is considered a unique construct in leadership research (Fulop, 2012). Clinician managers are individuals who have received specific training in clinical services and are then expected to lead or manage teams and businesses where they work (Kippist & Fitzgerald, 2009). In most cases, these individuals have received little to no formal training (Taichman et al., 2012).

In the medical field, clinicians were originally called upon to engage in managerial duties to mitigate the strain between clinical interests in hospitals and the demands of business administration directives. As stated by Wilson et al. (2013), meeting the challenges of providing quality medical care amid depreciating financial resources had led to a unique challenge for medical care providers, who have been asked to manage both sides of this continuum.

Kippist and Fitzgerald (2009) suggested that this hybrid clinician manager role promotes a particular conflict for leaders who adopt this role and eventually find themselves neglecting either the clinical or the business side of management responsibilities. This situation affects not only clinician managers but also other employees or professionals who must compensate for or deal with the consequences of clinician managers who cannot navigate the complexities of clinical and business responsibilities (Kippist & Fitzgerald, 2009). Clinician managers often experience internal conflict when autonomy and patient care clash with organizational fiscal constraints (Forbes et al., 2004; Kippist & Fitzgerald, 2009).

Dentists experience high levels of stress at work, and clinical aspects of dentistry and staff management have been among the highest stressors reported by dentists (Chilcutt, 2009; Cooper, Mallinger, & Khan, 1978; DiMatteo, Shurgars, & Hays, 1993). Dentists typically fall into the definition of clinician manager. In a traditional solo dental practice comprising one dentist and clinical and business personnel, the dentist is required to manage the dental practice (Chilcutt, 2009). In fact, most often, the dentist also is the owner of the business. This situation not only creates the management

challenges described earlier but also introduces some potential ethical dilemmas for the DCM, who must maintain high-quality dental care while also running a profitable business (Kippist & Fitzgerald, 2009).

Definitions of Terms

Clinician manager: A person trained specifically to provide clinical services in the health care industry who also assumes responsibilities consistent with business management (Kippist & Fitzgerald, 2009). Clinician managers within the medical field were born out of the inherent conflict that has always existed among doctors, nurses, and hospital administration (Kuhlmann & von Knorring, 2014).

Contingency leadership: Leadership characterized by adapting to the followers' maturity and/or ability level. Situational leaders are sensitive to the environment of the workplace in terms of employee ability and motivation, so they adapt their leadership style accordingly. It is leadership based on a continuum of task-oriented versus person-oriented leadership (Vroom & Jago, 2007).

Dental teams: Individuals working together to provide dental care services (Solomon, 2012). Dental teams include all individuals within the dental practice, whether they are providing clinical or business support services. Specifically, typical dental teams comprise dentists, dental hygienists, and dental assistants, along with other dental personnel that can include secretaries, receptionists, financial coordinators, office managers, and sterilization assistants.

Emotional intelligence (*EI*): EI has four distinct constructs: emotion perception, emotion facilitation, emotion understanding, and emotion regulation (Newman et al., 2010). Salovey et al. (2008) described EI as

> The ability to perceive, appraise, and express emotion accurately and adaptively; the ability to understand emotion and emotional knowledge; the ability to access and/or generate feelings when they facilitate cognitive activities and adaptive actions; and the ability to regulate emotions in oneself and in others. (p. 185)

Employee engagement: Early definitions of employee engagement were postulated by Kahn (1990) as moments in which individuals bring themselves into or remove themselves from particular behaviors. As research in engagement theory progressed, Saks (2006) defined engagement as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (p. 601). Saks also described employee engagement as "a distinct and unique construct consisting of cognitive, emotional, and behavioral components associated with individual role performance" (p. 602).

Hybrid leadership: Describes the dual role of leadership that involves clinical and business leadership skills (Fulop, 2012; Kippist & Fitzgerald, 2009). This term is another description of clinician managers. These leaders are typically trained professionally in medical specialties, but they later assume leadership and management roles such as directors or heads of clinical units (Fulop & Day, 2010). Hybrid leadership also describes the need for leader attributes and skills as well as a distributive style of leadership (Fulop, 2012).

Laissez-faire leadership: A style of leadership that represents an avoidant or a passive type of leadership (Judge & Piccolo, 2004). It is a leadership style in which leaders avoid making decisions, hesitate to take action, and are absent when needed. Typically, these leaders are reluctant to influence or give directions to subordinates (Chou, 2012).

Psychological empowerment (*PE*): PE is a motivational concept of self-efficacy (Kirkman & Rosen, 1999). Although PE is a multifaceted construct and cannot be captured in a single concept, it has been defined as an increased intrinsic task motivation manifested in a cognitive orientation toward meaning, competence, self-determination, and impact at work (Spreitzer, 1995). Lee and Wei (2011) suggested that PE can be defined from a process, structural, or psychological approach. From a process perspective, PE is explained in terms of the relationships between structural antecedents and resulting psychological states. The structural approach to PE has been defined as management practices and behaviors that involve delegating authority and responsibility to employees. The psychological approach suggests that the PE of employees is a psychological state resulting from empowering practices (Lee & Wei, 2011).

Servant leadership: A leadership style that places the leader as a servant or steward of the organization and its members (Sendjaya & Sarros, 2002). The leader is servant first. Liden et al. (2008) identified nine dimensions that constitute servant leadership as a construct: emotional healing, creation of value for the community, conceptual skills, empowerment of subordinates, provision of assistance so that

subordinates can grow and succeed, ethical behavior, relationships, placement of subordinates first, and servanthood.

Transactional leadership: A leadership style weighted heavily in the self-interests of leaders and followers (Pieterse, van Knippenberg, Schippers, & Stam, 2009). It is highly focused on leader-follower exchanges (McCleskey, 2014). The three dimensions of transactional leadership are contingent reward, active management by exception, and passive management by exception (Judge & Piccolo, 2004).

Transformational leadership: A method of leadership that focuses on broadening and elevating the interests of followers, generating awareness and acceptance of organizational purposes, and motivate followers to look beyond self-interest to the greater good of their respective organizations (Bass, 1990). This organizational outcome typically is accomplished through leader charisma, which fosters inspirational motivation in followers and intellectual stimulation. Transformational leaders provide vision and a sense of mission, communicate high expectations, promote intelligence and problem solving, and provide personal attention and coaching to each follower (Bass, 1990).

Assumptions

I assumed that the participants would be truthful in their responses on the survey instruments. A particular concern about self-report surveys is the participants' ability to fake or distort results based on a desire to look better (Tett, Freund, Christiansen, Fox, & Coaster, 2012). Tett et al. (2012) found that the incidence of faking occurred in individuals applying for specific jobs, had higher cognitive abilities, and had more opportunities to fake.

I also assumed that the data collection instruments were accurate in measuring the desired constructs. I further assumed that the dental teams in the sample were unique and unbalanced regarding specific personnel attributes and abilities, along with size and scope of the dental teams being managed by the clinician managers. It also was assumed that the random sample represented the demographic characteristics of dental practices in the region. Other assumptions met in multiple regression analyses, in general, include linearity, homoscedasticity, independence of errors, normality of errors, and multicollinearity.

Scope of the Study

The study was limited to practicing dentists and dental teams. The primary reason for this limitation was that dentists are excellent examples of clinician managers, especially those working in solo or group practices that are not managed corporately. Although physicians and nurses also fall into this dual leadership role, many of them will have the support of hospital administrations in their management efforts. Often, dentists take on a pure hybrid role as clinicians providing dental care and as managers of for-profit businesses.

Limitations of the Study

From a quantitative perspective, the study was limited by the nature of self-report surveys. Surveys are standardized and are very rigid, leading to more generalized responses than what the in-depth nature of personal interviewing can provide. The issues of nonresponse rates, faking, and deception also can occur because of the subjective nature of self-report surveys (Tett et al., 2012

The study was also limited in scope by including only dentists as clinician managers, meaning that the results might not be generalizable to other professions dealing with clinician management. Therefore, additional studies might be needed to expand the generalizability of this study. For the purposes of this study, an MR analysis model was used to study the effect of the predictor variables on the criterion variables.

Significance of the Study

This study has positive implications from theoretical, practical, and social change perspectives. Although significant research has been conducted regarding leadership theory, EI theory, PE theory, and engagement theory, recent literature has indicated that leadership among clinician managers has been a relatively unexplored topic (Kippist & Fitzgerald, 2009) and that some clinician managers might not fit the traditional theoretical mold (Fulop, 2012). Studies in various organizational settings have shown that PE and employee engagement are associated with positive and desirable organizational outcomes (e.g., de Villiers & Stander, 2011; Rich et al., 2010; Saks, 2006; Seibert et al., 2011; Zhang & Bartol, 2010). Therefore, establishing important predictive correlations between DCMs' leadership style with the prescribed outcome variables of PE and employee engagement will further establish research in leadership theory and clinician management. Given that some discussion relative to the significance of the role of EI in leadership effectiveness exists (Harms & Crede, 2010; Ingram & Cangemi, 2012), I sought to determine the correlational relationship between EI and leadership style.

This research has practical implications. Effective dentist leadership fosters team PE, individual PE, and employee engagement. Empowered and engaged employees are

prone to manifest higher levels of job involvement, enhanced job performance, job satisfaction, intrinsic motivation, improved organizational citizenship, and organizational commitment (Rich et al., 2010). A correlation also has been found between engaged employees and increased financial returns for organizations (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009).

When team members are engaged in their jobs and are empowered to carry out job tasks, there is less for dentists to manage or worry about, thus reducing levels of stress that have been reported as high among dentists (Chilcutt, 2009; Myers & Myers, 2004; Paharia, 2004; Rada & Johnson-Leong, 2004). Engaged and empowered employees allow DCMs to focus on tasks consistent with their dental training, and this delegation of power might be key to successful dentist clinician management. Whether DCMs use transformational leadership skills such as participative leadership or charismatic motivation (Kim, 2002), or servant leadership qualities such as developing community among the team or investing in the growth of the employees (Spears, 2010), employees feel valued by their leaders and will experience more job satisfaction (Rich et al., 2010).

Perhaps most importantly, the environment developed from effective leadership and an empowered and engaged team will ultimately benefit the patients who visit dental practices (Taichman et al., 2012). Conversely, offices with unmotivated, dissatisfied, and burned-out DCMs and dental teams can expect to see lower satisfaction ratings among dental patients (Leiter, Harvie, & Frizzell, 1998). Dentists who are unclear about the complexities of the clinician manager role and have not had formal leadership training

might not be using leadership styles that are helpful in this unique health care environment.

From a social change perspective, improved leadership training among clinician managers, whether physicians, dentists, or any other occupation that fits the model, benefits clinicians and their teams. Dental or medical schools that develop leadership training and EI awareness courses as part of the regular curriculum also could provide a source for future clinician managers to recognize the importance of leadership training and awareness as a continuous component of professional development throughout a career. With the increase in managed health care, doctors have been asked to assume leadership roles in the workplace (Kippist & Fitzgerald, 2009), whereas dentists have traditionally stepped into that role for many years simply out of necessity (Chilcutt, 2009). Increasing effective leadership among clinician managers will have a positive ripple effect on other clinicians, health care staff, and patients.

Summary and Transition

Clinician managers might be leading and managing teams in ineffective ways. Researchers have suggested that at best, clinician managers do not fit the traditional leadership mold, and at worst, tend to neglect management duties over the clinical duties they were trained to do (Fulop, 2012). Even so, very little is being done in the health care industry, especially in dentistry, to support, train, and develop the leadership and management skills of clinician managers (Victoroff et al., 2009). This lack of skills could be affecting health care teams adversely and ultimately creating negative outcomes for patients seeking care.

In Chapter 1, I identified the leadership styles of DCMs that can lead to team PE, individual PE, and employee engagement. Results of this study can stimulate social change by improving the workplace conditions for DCMs, their teams, and the patients whom they serve by identifying the variables that increase the engagement and empowerment of dental care team members.

In Chapter 2, I present a literature review of the key theories and constructs pertinent to the study. Theoretical foundations and conceptual frameworks of leadership, EI, empowerment, and engagement, along with historical and current dynamics of dental practice in the United States, are described. The hybrid role of the clinician manager, leadership theory and styles, EI theory, PE, employee engagement, and team dynamics are discussed. In Chapter 3, I detail the research methodology used in the study. Included in the discussion is a review of the research design of this quantitative study. The sample, target population, data collection methods, and ethical concerns are presented.

In Chapter 4, I provide the results of the study. Quantitative MR and correlational analyses were conducted, and all relevant data are presented in textual and table format. Each RQ and hypothesis is addressed. Chapter 5 includes a discussion of the findings, including theoretical and practical implications, some of the limitations discovered during the research process, and recommendations for future research.

Chapter 2: Literature Review

Overview

This chapter contains a literature review of the theoretical foundations, conceptual framework, and descriptions of key constructs. From a theoretical basis, I discuss leadership, EI, empowerment, engagement, and group dynamics theories. Conceptually, I focused on the leadership effectiveness of DCMs. It was based on theoretical assumptions that the leadership styles and EI of the participants had an impact on employee outcomes such as individual and team PE and employee engagement.

Literature Search Strategy

I conducted the primary search of relevant literature using Academic Search Complete, Business Source Complete, PsycARTICLES, PsycBOOKS, PsycINFO, PsycTESTS SocINDEX, Mental Measurements Yearbook, SAGE Full-text Collection, and ProQuest databases. Google Scholar searches were used as an adjunct to find specific articles on desired topics. Specific dental related searches were conducted within the *Journal of the American Dental Association* and the *Journal of Dental Education*. Topics related to *clinician management*, *employee engagement*, *leadership and leadership style*, *emotional intelligence theory*, *psychological empowerment theory*, *social exchange theory*, *self-determination theory*, *dentistry*, along with other relevant key words within these resources, resulted in many articles and data related to the topic of clinician management and leadership influences on engagement and PE in the workplace. Within each of those articles were lists of cited references that were helpful in improving the research process and identifying articles that have been used widely by other researchers

as foundational research. Although most of the resources compiled were articles published within the last 10 to 15 years, some older research was because of its relevance to the study.

Leadership Theory

Theories of leadership are abundant, necessarily resulting in a lack of theoretical integration when considering the subject as a whole (Derue, Nahrgang, Wellman, & Humphrey, 2011). As such, leadership theory is one of the most discussed and debated topics among leadership researchers: however, general categories can be identified, namely, transformational, transactional, laissez-faire, and servant leadership styles (Bass, 1990; Greenleaf, 1998). Transformational leadership emerged as a popular theoretical construct based on the construct of inspirational motivation to transform followers from a state of self-interest to one of organizational intent (McCleskey, 2014). Transactional theories, which emerged in the 1970s, claimed that leaders must be effective in establishing a mutually reinforcing environment that can be generally accomplished by creating a culture of rewards and punishments for efforts toward organizational goals (McCleskey, 2014). Laissez-faire leadership style was categorized by Bass (1990) as a transactional type of leadership. Although considered a lack of leadership, or simply the opposite of autocratic leadership (Goodnight, 2004), it might have some redeeming qualities in developing the autonomy and self-determination among followers (Ryan & Deci, 2000). Servant leadership theory has two primary constructs: ethical behavior and concern for subordinates (Choudhary, Akhtar, & Zaheer, 2012). This type of leadership

suggests that leaders are more concerned about followers' learning, growth, and autonomy than personal interest. The leader is servant first (Greenleaf, 1998).

Transformational Leadership Theory

Pieterse et al. (2009) defined transformational leadership as a style of leadership that "transforms followers to rise above self-interest by altering their morale, ideals, interests, and values, motivating them to perform better than initially expected" (p. 610). As such, transformational leaders strive to empower (Avolio et al., 2004; de Villiers & Stander, 2011; Drew, 2010; Zhang & Bartol, 2010); motivationally inspire (Martin, 2009; Ryan & Deci, 2000); encourage participation (Huang et al., 2009); and develop growth in their employees. Inspiring employees to have pride in their work or motivating them to improve their performance are examples of transformational leadership.

It also has been shown that when employees believe that their leaders care (Vinarski-Peretz & Carmeli, 2011) and provide an optimum working environment (Tuckey, Bakker, & Dollard, 2012), they become more engaged and committed to the organization (Avolio et al., 2004; Babcock-Roberson & Strickland, 2010). Although some evidence has supported some types of transactional leadership (e.g., financial rewards, task-oriented goals, and training) as helpful in employee engagement, a preponderance of evidence has pointed toward a clear link between transformational leadership style and employee engagement (Raja, 2012). Transformational leadership is characterized by leaders with charisma who lead with inspiration, foster intellectual stimulation among followers, and exercise individualized consideration of each employee (Bass, 1990).

Charismatic leadership is a primary component of transformational leadership; in some cases, they are considered analogous constructs (van Knippenberg & Sitkin, 2013). Therefore, much of the research on charismatic leadership has been applicable to transformational leadership theory. Charismatic leaders have influence over followers because they are perceived as strong and effective leaders with an appealing vision (Babcock-Roberson & Strickland, 2010). This perception, coupled with the leaders' ability to articulate this vision in a way that is congruent with the followers' role self-concepts within organizations, creates a workplace environment in which organizational goals and values are internalized by employees (Wilderom, van den Berg, & Wiersma, 2012). Charismatic leaders increase employee efficacy by showing confidence in employees' abilities to accomplish collective objectives. Thus, transformational leaders motivate and inspire followers (Avolio et al., 2004).

Motivating and inspiring employees in the workplace has been a long-standing concern and is a central component of transformational leadership theory (Bass, 1990). Researchers have viewed motivation in two ways: intrinsic and extrinsic. Vinarski-Peretz and Carmeli (2011) viewed motivation as a "set of energetic forces that originates both within as well as beyond an individual's being to initiate work-related behavior, and to determine its form, direction, intensity, and duration" (p. 45). They further stated that transformational leadership style can influence both forms of motivation. Extrinsic motivation deals with the desire to attain a separate outcome based on the performance of activity; whereas intrinsic motivation suggests reward for accomplishing the activity itself (Ryan & Deci, 2000).

Transformational leaders are particularly adept at developing employees' intrinsic motivation (Conchie, 2013). They are concerned with taking passive, alienated, and dysfunctional employees to high-functioning, proactive, engaged, and inspired employees (Babcock-Roberson & Strickland, 2010). Babcock-Roberson and Strickland (2010) also found that inspirational and charismatic leaders provide a vision that resonates with individual and collective ideological values that causes followers to become energized about the vision. This fundamental component of transformational leadership builds followers' confidence, trust, and admiration of the leaders and is positively correlated with performance levels at the individual, group, and organizational levels (Jha, 2014).

Transformational leaders focus on building the individuals through empowerment, encouragement of participation, and training (Jha, 2014). PE is a process in which employees develop a sense of self-efficacy in their given roles (Zhang & Bartol, 2010). According to Zhang and Bartol (2010), self-efficacy is manifested in employees who (a) believe that their work has meaning and importance to them and the organization, (b) believe that they are able to perform assigned tasks successfully, (c) perceive the freedom to choose how to initiate and carry out tasks with certain levels of autonomy, and (d) believe that their actions make a difference in work outcomes. PE occurs when employees are motivated to achieve goals and when an enabling workplace environment encourages employees to accomplish their assigned tasks (Tuckey et al., 2012). Empowering leadership has been shown to optimize working conditions for engagement, increased creativity, increased job satisfaction, and improved organizational

outcomes (Zhang & Bartol, 2010). Leaders empower employees through task delegation, participative management, and training (Huang et al., 2009)

Participative leadership includes empowering workers (Kim, 2002). Kim (2002) cited ample evidence that employees who are involved and have a stake in the strategic planning of organizational outcomes possess greater levels of engagement in organizational tasks. Kim also noted that delegating authority, developing autonomy, and including employees in goal setting empowers them to achieve more for their organizations than those who just do what they are told to do. Leaders show trust in employees when they (i.e., the employees) are given responsibilities and autonomy in their job roles; allowing employees to participate in goal setting gives them the opportunity to gain a clear understanding of the organizational vision and desired outcomes (Chen et al., 2011).

Having a clear understanding of goals, tasks, roles, and rewards enhances empowerment among employees (Avolio et al., 2004). However, delegation does not come without inherent risks (Maier & Thurber, 1969). Maier and Thurber (1969) found that simply delegating and giving employees freedom in the workplace is not enough. They stated that negative outcomes occur when delegation is given without proper training and that self-efficacy diminishes while outcomes become inconsistent. In conclusion, they found that it is crucial to provide proper training and supervision in the delegation process.

In a study of 520 nurses in a public hospital, Avolio et al. (2004) found that PE mediated the effects of transformational leadership promoting employees' organizational

commitment. Turnover is costly from financial aspects and in regard to organizational morale (de Villiers & Stander, 2011). Charismatic leaders who show genuine care for their subordinates tend to enhance commitment to their respective organizations (Babcock-Roberson & Strickland, 2010; Vinarski-Peretz & Carmeli, 2011). Avolio et al. (2004) also suggested that transformational leadership improves work attitudes and behaviors at the organizational level. Transformational leaders, through empowerment, delegation, motivation, and inspiration create a positive environment that employees desire (Raja, 2012). Turnover is reduced, and workers become more engaged, giving more of themselves to the goals of the organizations.

Transactional Leadership Theory

Transactional leadership focuses on exchanges between leaders and employees (McCleskey, 2014). As stated by McCleskey (2014), transactional leadership is managerial in nature and concentrates on supervision, organization, and group performance. It looks for day-to-day efficiencies of business practices. Through these exchanges, leaders strive to accomplish organizational performance objectives, maintain the current organizational situation, direct behaviors toward the leaders' goals, and motivate employees through contractual agreements (McCleskey, 2014). In addition, employees focus on self-interest and what they can acquire in the exchange, focusing primarily on reducing personal workplace anxiety and obtaining clear organizational objectives such as improved quality, increased productivity, and better customer service. McCleskey identified four basic assumptions of transactional leadership: (a) Individuals and groups perform best when they have a clear understanding of the chain of command,

(b) reward and punishment motivate workers, (c) following the instructions and desires of leaders or organizations is the primary goal of the followers, and (d) employees need to be monitored closely to ensure that organizational objectives are met.

A key component of transactional leadership theory is based in behavioral psychology and relies on reward and punishment to influence followers' behaviors (Bass, 1990). According to Balliet, Mulder, and Van Lange (2011), rewards and punishments are effective promoters of cooperation in the group setting. It is in this social context that the greatest value is perceived, even when punishments are executed. In a meta-analytic review of reward behavior and punishment behavior, Podsakoff, Bommer, Podsakoff, and MacKenzie (2006) found that punishment had a stronger effect than individual performance on group performance. In addition, when others observed a justified sanction or punishment of another employee who was underperforming, it tended to establish group norms and incentivize the desired behaviors in the group. Results also found that although punishment tended to improve certain workplace attitudes, it did not necessarily translate to improved levels of performance. However, Podsakoff et al. cautioned that using punishment inappropriately, such as leader retribution or as a show of authority, can have a demotivating effect on the group.

Four dimensions of exchanges occur in transactional leadership: contingent rewards, active management by exception, passive management by exception, and laissez-faire (Judge & Piccolo, 2004). Contingent rewards deal with a contractual exchange of rewards for efforts and suggests that good performance will be rewarded and acknowledged by the leaders (Judge & Piccolo, 2004), who clarify expectations and

establish rewards for meeting those expectations. Active management by exception has been described as leaders who watch for deviations from rules or standards and take corrective action as these deviations occur (Judge & Piccolo, 2004). Passive management by exception suggests that leaders engage with employees only when standards are not met (Judge & Piccolo, 2004).

Laissez-faire transactional leadership is more indicative of leaders who avoid decisions and abdicate responsibilities (Judge & Piccolo, 2004). Because of the lack of leadership involved with the laissez-faire leadership style, the suggestion has been made that it should be treated separately from the transactional leadership style (Judge & Piccolo, 2004). Thus, as seen in the MLQ, laissez-faire leadership has a separate and distinct measurement from transactional leadership (Avolio & Bass, 2014).

Laissez-faire leadership is typically associated with or perceived as an ineffective and even detrimental form of leadership by employees (Judge & Piccolo, 2004). As opposed to empowering leadership, in which leaders intentionally decentralize power by involving followers in the decision-making process, laissez-faire leadership is simply the absence of leadership, meaning that leaders avoid confronting problems and ignore employees' needs (Bass, 1990).

Servant Leadership Theory

In 1977, Greenleaf formally introduced the concept of the servant leader, whose primary focus is on the growth of employees (as cited in Spears, 2010). This developing area of leadership research has yet to formulate a concrete theoretical framework (van Dierendonck, 2011). A key principle of servant leadership is the leaders' inward desire to

serve those whom they lead. Servant leaders go beyond self-interest. Instead of using power to get things done, they try to persuade and enroll employees (Boone, 2012). They also seek to endorse follower autonomy. Sendjaya and Sarros (2002) described the primary intent and self-concept of servant leaders: They serve first; lead second; and are servants or steward, not leaders or owners.

Liden et al. (2008) stated that servant leadership tends to resemble transformational leadership, particularly in the characteristics of idealized influence and intellectual stimulation. Specifically, they found that servant leaders strive to set an example for employees to emulate, inspire and encourage followers to grow, express personal views, and challenge the status quo. However, servant leadership remains distinct from transformational leadership because servant leaders tend to be sensitive to the needs of numerous stakeholders and they also encourage employees to engage in moral reasoning (Liden et al., 2008). Another significant difference is that servant leadership focuses on genuine concern for employees, whereas transformational leadership focuses on organizational objectives and assisting followers to that end (van Dierendonck & Nuijten, 2011).

Servant leaders approach employee relationships from the perspective of equality and social responsibility (van Dierendonck & Nuijten, 2011). In short, servant leaders "place the needs of their subordinates before their own needs and center their efforts on helping subordinates grow to reach their maximum potential and achieve optimal organizational and career success" (Liden et al., 2008, p. 163). Liden et al. (2008) identified nine dimensions that constitute servant leadership as a distinct construct:

emotional healing, creation of value for the community, conceptual skills, empowerment, provision of help so that subordinates can grow and succeed, ethical behavior, relationships, placement of subordinates first, and servanthood.

Emotional healing, as described by Spears (2010), is the ability to heal oneself and others from spiritual or emotional pain. It is the act of showing sensitivity to others' concerns (Liden et al., 2008). Most individuals have some history that they bring to the office with them. For example, some employees have suffered various emotional hurts in their lives. Servant leaders are cognizant of this reality and are desirous to help these individuals to become whole.

Emotional healing goes beyond a mere interest in employees' organizational success and happiness in the workplace. Servant leaders are genuinely concerned about employees' happiness and fulfillment not only at work but also in life. Being aware of and sensitive to employees' personal concerns demonstrates a listening and empathic ear, which garners trust and connectedness between leaders and employees. Rivkin, Diestel, and Schmidt (2014) demonstrated that servant leadership is an important determinant of employees' psychological health. Servant leaders believe that it is a common goal and desire of all individuals to feel whole and well emotionally and psychologically. Therefore, obtaining emotional and psychological health is a joint effort for leaders and employees (Spears, 2010). Emotional healing is fostered by effective listening skills and genuine empathy.

Creating value for the community refers to endeavors within and without the organizational domain. Servant leaders are keenly aware of the weakening of the

community in recent human history (Spears, 2010). Efforts to build community in organizations are not necessarily accomplished by mass movement, but by one person at a time instead. As described in social identity theory, individuals who identify with the group or the community have a tendency to be more committed to either (Meyer, Becker, & van Dick, 2006). As community is fostered, servant leaders create a community whose members are committed to each other and collective organizational goals.

Conceptual skills refer to the ability of leaders to dream great dreams and to see beyond the mundane day-to-day operations to the greater good and potential of their organizations and employees (van Dierendonck, 2011). Although this ability might be difficult for managers placed deep in the trenches of everyday deadlines and production quotas, servant leaders have the ability to think on a more broad-based spectrum. These individuals might be referred to as visionaries, the ones who see the big picture and help everyone else to see it, too.

Foresight deals with the ability to see the outcomes of current decisions and their impact on organizations and individuals. Seasoned servant leaders draw upon the lessons of the past, the realities of the present, and with relative accuracy, they can predict the likely outcomes of decisions for the future (Spears, 2010). Spears (2010) also commented that this intuitive ability might be the one characteristic inborn or innate to servant leaders. Where the other characteristics are clearly developable, foresight might have some limitations to those not predisposed with the ability. Although seeing the big picture is an important part of leadership, servant leaders also become familiar enough with their

organizations and tasks at hand so that they can support and assist employees effectively in their day-to-day operations (Liden et al., 2008).

Empowering employees and helping subordinates to grow and succeed are fundamental desires of servant leaders accomplished by providing support and mentoring. These desires can be achieved by helping employees to problem solve and complete work tasks. Servant leaders are committed to the growth of people, nurturing them personally, professionally, and spiritually (van Dierendonck, 2011). Servant leaders do this because they believe that there is intrinsic value in people far beyond their tangible workplace contributions (Spears, 2010). Some examples of this commitment include setting aside funds specifically for the personal and professional development of company employees, taking a personal interest in followers' ideas and helping them develop those ideas, and supporting participative decision making.

Relationships are developed as servant leaders make a genuine effort to know, understand, and support employees, with an emphasis on developing long-term relationships (Liden et al., 2008). Listening is an important skill in developing relationships. Servant leaders strive to identify the will of their employees and help to clarify that will through intent listening (Spears, 2010). Understanding what is spoken, as well as what is not spoken, and exercising excellent communication skills are hallmarks of these leaders. Because servant leaders are expressly concerned about the well-being, growth, and the unique potential of each employee, they spend the necessary time to understand what their employees think, feel, and believe. This time leads to a wealth of empathy for their employees.

Inherent in the definition of empathy, servant leaders identify with their employees because they have either been the recipients of empathy themselves or they have been able to step into those persons' shoes and understand what they are thinking and feeling. As stated by van Dierendonck (2011), they have the cognitive ability to adopt the psychological perspectives of others. Employees feel like they are understood and that leaders care, which leads to increased engagement and innovation (Vinarski-Peretz & Carmeli, 2011). Empathic leaders understand employees on a unique and individual level, and they tend to avoid viewing them as a homogeneous group with only collective feelings and ambitions. These leaders are optimistic regarding the characters and intentions of employees (Spears, 2010). They assume that employees have good intentions, even when behavior and performance occasionally seem otherwise, and they can let go of perceived wrongdoings and grudges (van Dierendonck, 2011). Leaders with great skills in listening and empathy are the most successful (Spears, 2010).

Putting subordinates first, behaving ethically, and believing in servanthood are at the core of servant leadership. Leaders see themselves as servants first (Spears, 2010). This view requires a level of humility and self-awareness, along with their role in their organizations. Servant leaders do not shy away from self-knowledge or personal awareness, no matter how painful the awareness might be, because they know that it will ultimately make them better leaders and better people. Self-awareness strengthens the leaders (Spears, 2010).

In 1977, Greenleaf observed that awareness is not a giver of solace; rather, it is just the opposite, being a disturber and an awakener (as cited in Spears, 2010). Servant

leaders have the ability to listen to their own inner voices (Spears, 2010). They become keenly aware of what their own minds, bodies, and spirits are communicating. They take quiet moments to reflect regularly. Serenity comes from an inner knowing, and fear is overshadowed by the benefits of personal empowerment. This inner awareness compels servant leaders to act ethically by interacting openly, fairly, and honestly with others (Liden et al., 2008). Servant leaders encourage and assist employees to develop this characteristic.

Servant leaders respect the leadership position. They consider themselves stewards. To have stewardship over someone or something means to hold something in trust for someone else (Spears, 2010). For example, servant leaders are given stewardship over the welfare of their companies, their employees, and the greater good of the community. Uniquely, in servant leadership, however, is the initial drive within servant leaders to serve those to whom they are stewards. They do not rule, govern, or lead; rather, they serve, and through that service, they gain the trust and followership of those who would have them lead. They do not use their position of power to enforce compliance or coerce others. Instead, they rely on the attributes of persuasion to convince others (Spears, 2010). They strive to build consensus among groups and individuals. In line with the overarching tenet of seeking the contributions and wills of employees, servant leaders build consensus by listening to the opinions, wishes, and desires of their employees and then incorporating them into proposals that all can accept and agree upon.

Contingent Leadership

The best kind of leadership for DCMs might be a style that is flexible and adaptive to the various circumstances that arise in managing dental practices (Kippist & Fitzgerald, 2009). Dentists who might be more prepared to manage the clinical aspects of their practices might find it more challenging to manage the intricacies of business practices necessary to ensure the success and profitability of their dental practices (Chilcutt, 2009). Having knowledge and ability in both areas of management are necessary skills for clinician managers (Kippist & Fitzgerald, 2009).

Researchers have proposed that the role of situation in leadership is significant (McCleskey, 2014; Vroom & Jago, 2007). As early as 1967, Fiedler put forth a model of leadership that included not only trait-based leadership variables but also situational variables (as cited in Vroom & Jago, 2007). Hersey and Blanchard (1969) also developed situational leadership theory (SLT), which highlights the continuum of leadership between task-oriented and relation-oriented factors in leadership. There has been significant debate about the efficacy of the theoretical validity of SLT (Graeff, 1997); however, it has been widely accepted that successful leadership includes task-oriented as well as relation-oriented leadership strategies (McCleskey, 2014). In as much as this study focused on leadership effectiveness, an overview of situational leadership theories is offered next.

Contingency theory. Contingency leadership theory suggests that organizations are unique systems that need skillful management in order to satisfy internal needs and adapt to situational circumstances (Vroom & Jago, 2007). As such, there is no one best

way to lead, given that it is dependent on the task at hand or the existing environment. Effective leaders and managers will seek out good alignment and fit of personnel with tasks and will adapt to various environments (Beer, Voelpel, Leibold, & Tekie, 2005). Fiedler's contingency model was based on three dimensions: leader-member relationship, degree of task structure, and leaders' position power (as cited in Vroom & Jago, 2007). The leader-member relationship signifies the level of acceptance and respect extended toward leaders from their followers. As described in LMX theory, the more positive the exchanges between leaders and followers are, the more positive the relationship will be, and improved organizational behaviors will be observed (Li & Liao, 2014).

Situational leadership theory. SLT development was largely introduced by Hersey and Blanchard (1969). The basic premise of SLT is that leadership is based on the amount of task or relationship behavior that leaders provide for followers. Vroom and Jago (2007) suggested that leadership characteristics or ability is secondary, if not unimportant, to the structural or situational dynamics within organizations. In other words, the situational demands in organizations and/or the needs at a particular moment, not leader traits, will determine leadership style. Hersey and Blanchard suggested that leadership style is based on the maturity and motivational levels of individuals within organizations. They defined maturity levels as follows: (a) lacking specific skills required of the job and are unwilling to take responsibility for the job; (b) unable to take on the task, but willing to work at it; (c) experienced and able to take on the task, but unwilling or lacking confidence to take on the task; and (d) experienced and able to take on the task well and take responsibility for the task.

Motivational factors include a continuum between competence and commitment. The level of maturity and/or motivation within groups or individuals will determine whether leaders adopt one of four leadership styles (Hersey & Blanchard, 1969). Telling is characterized by leaders defining the roles of individuals or groups and providing the details of carrying out tasks. Selling suggests that even though individuals or groups are capable of participative involvement in the process, they require leader direction. Participating is characterized by shared decision making regarding the tasks at hand, and the leaders focus more on maintaining high relationship behaviors. Delegating is a leadership style with minimized leader involvement characterized by the heavy delegation of responsibilities to individuals or groups while maintaining a supervisory and decision-making presence (Hersey & Blanchard, 1969).

There has been some debate as to whether SLT is a viable theoretical construct (Graeff, 1997). Graeff (1997) asserted that internal consistency issues in the theory, combined with the conceptual ambiguity of the task-relevant maturity concept, bring into question its theoretical foundation. Subsequent scrutiny of the theory led to the softening of claims regarding SLT as a theory as much as it is a practical model for leadership (Graeff, 1997). Basic concepts of SLT, however, such as organizational effectiveness affected by situational factors outside of leadership control and situations that shape or influence how leaders behave, are applicable concepts when seeking to understand the dynamics of clinician management (Vroom & Jago, 2007).

Emotional Intelligence Theory

Growing evidence has suggested that moods and emotions have a significant role in cognitive processes and behaviors (George, 2000). Emotions relate to strong feelings that typically arise in response to events and are an affective aspect of consciousness (Salovey & Mayer, 1990). Emotions are based on highly subjective cognitions, making it difficult for psychologists to define or describe emotions. Many different definitions have emerged, but most have agreed that emotion is a complex state of mind involving a wide range of physical reactions (Singh, 2006). These reactions, such as increased breathing, rapid heartbeat, flushed face, and sweaty palms, are physiological effects that can influence thoughts and behaviors. Psychological manifestations of emotion might include a state of "excitement or perturbation marked by strong feelings" (Singh, 2006, p. 30). Emotions are generated by various situations and can be influenced by cognitive interpretations of these events (Ellis & MacLaren, 2005).

The basis of EI theory reflects on the ability to manage emotions in self and others. Individuals with EI tend to have high levels of accountability for their own emotions and take responsibility for all thoughts and behaviors related to those emotions (Singh, 2006). Singh (2006) cited such behaviors and qualities as initiative, empathy, motivation, and leadership. Simply stated, EI is the ability to use all emotions intelligently. EI theory deals with the perceiving of emotions, using emotions to facilitate cognition, understanding emotions, and managing emotions (Salovey et al., 2008).

Perceiving emotion refers to the ability to recognize emotions in a variety of stimuli and is initiated by affect-laden information appearing in the perceptual system,

thus stimulating the need for appraisal and expression (Salovey et al., 2008). As stated by Salovey et al. (2008), this component of EI refers to the ability to identify emotion in one's physical state, feelings, and thoughts, and to do likewise in other individuals. It also points to the ability to express emotions accurately and discriminate between accurate or inaccurate expressions of feelings. Finally, Salovey et al. concluded that the ability to appraise accurately and express effectively appropriate emotions within the self and others is a key component of EI.

Using emotion to facilitate cognition refers to the ability to prioritize thinking based on the associated feelings to facilitate judgment and memory, capitalize on mood changes and empathize with others' points of view, and facilitate problem solving and creativity (Salovey et al., 2008). Understanding emotion requires the ability to recognize the relationships between and among various emotions; perceive the causes and consequences of emotions; and understand the complex feelings, blends of emotion, contradictory emotional states, and transitions in emotion (Salovey et al., 2008). To manage emotions effectively, people must be able to be open to feeling, whether pleasant or otherwise; monitor and reflect on emotion; successfully engage in, prolong, or detach from emotional states; and manage their own emotions (Salovey et al., 2008).

Neale, Spencer-Arnell, and Wilson (2009) emphasized that current attention over EI is not merely a fad, but a manifestation of the practical and theoretical evidence linking EI to performance in the workplace. They claimed that EI development in individuals, teams, and organizations can lead to a more productive, successful, and sustainable business culture. Singh (2006) suggested that employees who learn and

embrace the principles of EI are better team players; are more creative and more productive; and are better able to overcome obstacles, setbacks, and conflicts in the workplace. In addition, leaders are more successful in developing leadership skills, adapting to change, stimulating cooperation and creativity, and improving employees' organizational commitment (Singh, 2006). In a study of 157 nurses, Cheng, Huang, Lee, and Ren (2010) found that EI had a moderating role in reducing job insecurity and mitigating job-related somatic disorders. Also cited in the study was the direct effect of higher levels of EI on lower occupational stress and higher affective commitment or attachment to the organization. Emotionally intelligent individuals are more able to recognize the early stages of conflict and mitigate or avoid conflict altogether. Having this ability is important, given that 65% of performance problems in the workplace stem from some type of conflict (Ingram & Cangemi, 2012).

Empowerment Theory

PE has been defined as the level of intrinsic motivation toward one's work role in four cognitive areas: meaning, competence, self-determination, and impact (Zhu et al., 2012). It is a process of developing a sense of self-efficacy in job tasks and responsibilities (Zhang & Bartol, 2010). PE also is strongly correlated with high performance, social support, job satisfaction, leadership, organizational commitment, organizational citizenship, and work characteristics (Huang et al., 2009; Seibert et al., 2011). Team dynamics show that PE is a mediating factor regarding team performance, team goal setting, and team identity (Lee & Wei, 2011). PE has been cited in the

literature as a mediating factor in both individual and team workplace dynamics (Tuuli & Rowlinson, 2009b).

Individuals with high levels of PE believe that their work is meaningful and important to their respective organizations, they are able to perform the work or job tasks, they have some freedom or autonomy in carrying out given tasks or assignments, and their contributions make a difference in work outcomes (Tuuli & Rowlinson, 2009a). Some of the consequences of PE include the manifestation of positive task and contextual behaviors, which is mediated partially by the opportunity or ability to perform and employees' levels of intrinsic motivation (Tuuli & Rowlinson, 2009a). PE is an isomorphic construct that maintains the same basic meaning across levels (Tuuli & Rowlinson, 2009a). Therefore, definitions and manifestations of PE are expressed similarly for individuals and teams. When studying groups or teams, team members will have a collective belief regarding authority and autonomy over their work and that their collective effort has meaning and impact on organizational outcomes.

Antecedents of Psychological Empowerment

Both contextual and individual characteristic factors exist as antecedents of PE (Seibert et al., 2011). Contextual factors comprise high-performance managerial practices, sociopolitical support, and leadership and work design characteristics; individual characteristics include positive self-evaluation traits and human capital characteristics (Seibert et al., 2011). High-performance managerial practices, as described by Seibert et al. (2011), tend to enhance all four cognitive areas of PE. These practices can be accomplished as leaders share information openly, delegate meaningful and

important organizational tasks, allow employees to participate in decision making, provide needed training, and base compensation that is contingent on performance. The second factor, sociopolitical support, refers to an organizational climate that makes employees feel valued and accepted. It is an environment in which employees perceive high levels of trust in and from leaders and that their work is personally meaningful to the organizations (Seibert et al., 2011). The third factor is leadership, an important construct because it is usually the leadership that develops the climate where employees feel psychologically empowered. Positive leader-employee relationships, as demonstrated by leaders who are vested in employees' growth and development, and who extend trust and responsibility to employees, tend to precede PE in employees (Seibert et al., 2011). The last factor refers to work design characteristics, or the nature of the work being done by employees. Work that is meaningful and allows employees to develop competency leads to higher levels of self-efficacy and PE (Seibert et al., 2011).

The individual characteristic factors of positive self-evaluation traits and a high degree of job level, age, and tenure are important antecedents to PE (Seibert et al., 2011). Positive self-evaluation traits, as defined by Seibert et al. (2011), have to do with the way employees see themselves in relation to the workplace environment. A positive self-appraisal tends to foster an internal locus of control, generalized self-efficacy, and emotional stability. In addition, Seibert et al. described the importance of job level, age, and tenure. Higher levels of these variables impact work productivity and individual PE positively. Of these characteristic factors, it appears that having a positive self-concept has the strongest connection to PE (Seibert et al., 2011).

Consequences of Psychological Empowerment

The positive consequences of PE include increased job satisfaction, organizational commitment, strain, task performance, organizational citizenship behaviors, and innovation (Seibert et al., 2011). Job satisfaction has a cognitive and affective function related to employees and their perceptions of their situations at work. Job satisfaction occurs when employees appraise their jobs positively and have subsequent positive emotional states (Judge, Parker, Colbert, Heller, & Ilies, 2001; Saari & Judge, 2004). Saari and Judge (2004) suggested that job satisfaction, or lack thereof, has many consequences, including, but not limited to, low productivity levels and high turnover rates. When employees find that their work is meaningful and they have a level of autonomy and competency, they tend to exhibit greater organizational commitment (Seibert et al., 2011). Seibert et al. (2011) suggested that these qualities of employment become so valuable to the employees that they question whether they can find the same qualities elsewhere thus increasing the likelihood of their staying with the organizations and reducing turnover intent. Strain, as described by Seibert et al., is a concept that might seem like a negative construct relating to employment. However, increased strain refers to the fact that employees are relied upon more to accomplish tasks through delegation, participatory decision making, and increased autonomy, suggesting that organizations are dealing with psychologically empowered individuals (Seibert et al., 2011).

Task performance, organizational citizenship behaviors, and innovation are all behavioral consequences of PE (Seibert et al., 2011). They suggested that psychologically empowered individuals tend to problem solve better, act independently, exude

persistence, and exert influence over personal and organizational goals, all of which can lead to higher quality job task outcomes (Seibert et al., 2011). In addition, job or task performance has been shown to correlate significantly with the characteristics of meaningfulness and self-determination, two constructs that define PE. Organizational citizenship behaviors are reflective of employees' commitment to perform above and beyond their job responsibilities (Spreitzer, 2008). This performance might include individual contributions that lie without normal job descriptions but are perceived as beneficial to the effectiveness of the organizations (Organ & Ryan, 1995).

A primary objective of empowerment is to release employees' potential (Seibert et al., 2011). Seibert et al. (2011) suggested that as this goal is accomplished, a positive outcome often seen with PE is innovation, concluding that innovative employees strive to create or discover better ways to produce or serve customers and to develop and share new ideas to help their organizations to improve processes and systems. Knol and van Linge (2009), in their study of 517 registered nurses in the Netherlands, also found that structural empowerment and PE encouraged innovative behaviors among their sample. According to Seibert et al. (2011), the reason employees are willing and able to be innovative is because of their feelings of autonomy and competence.

Engagement Theory

Work engagement has been defined "as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication and absorption" (González-Romá et al., 2006, p. 166). According to Saks (2006), employee engagement is "a distinct and unique construct consisting of cognitive, emotional, and behavioral components associated with

individual role performance" (p. 602). In both definitions, engagement is described as a cognitive event or a state or mind in which employees experience their roles in the workplace. This state of mind leads to emotional state, defining how they feel about their work, which in turn leads to behaviors. This sequence is grounded in cognitive behavioral theory (Ellis & MacLaren, 2005). Cognitive theorists have posited that what individuals think determines such outcomes as emotions and behaviors. Leaders must realize that employees' perceptions and interpretations of events in the workplace are far more important than what might actually be considered reality (Ellis & MacLaren, 2005), perhaps because what they perceive is their reality and can directly affect their level of engagement.

The state of mind of engaged employees is characterized by three components: vigor, dedication, and absorption (Saks, 2006). Vigor refers to having strong feelings of enthusiasm or intensity. Engaged workers will be enthusiastic about their jobs and the organizations for which they work (Saks, 2006). Dedication is a kind of selfless devotion to someone or something; in this case, dedication refers to devotion to one's job and organization. Selflessness refers to putting organizational objectives or tasks first. Absorption describes employees who give the tasks at hand all of their attention and interest (Saks, 2006). They are committed to learn and acquire any skill or knowledge necessary to accomplish assigned tasks. Research has identified specific antecedents and consequences to engagement in the workplace (Saks, 2006).

Antecedents of Engagement

Kahn (1990) suggested that engagement exists when employees are psychologically present when performing organizational roles. This psychological state determines the level of engagement in work-related activities, as has been found to oppose conditions found in burnout research (Denton, Newton, & Bower, 2008; Kahn, 1990; Maslach & Leiter, 2008). For example, González-Romá et al. (2006) found that the dimensions of vigor and dedication within engagement contrast with the dimensions of exhaustion and cynicism, which define burnout. Kahn (1990) identified three primary antecedents of engagement: psychological meaningfulness, psychological safety, and psychological availability.

Psychological meaningfulness. Kahn (1990) described psychological meaningfulness as a sense of feeling worthwhile, useful, and valuable to organizations. Rich et al. (2010) described psychological meaningfulness as value congruence. In essence, when organizations' values are congruent with employees' values and reflect the preferred self-images of how employees wish to be perceived, employees are much more likely to engage in job-related tasks. Jeung (2011) identified specific job characteristics (i.e., task identity, task significance, task autonomy, and feedback) as positive correlations to high levels of job engagement.

Psychological safety. Kahn (1990) described psychological safety as the belief that it is possible to invest oneself into the job role without fear of negative consequences. Leaders play a key role in establishing this sense of safety by offering their direct support and creating an environment of trusting interpersonal relationships among employees

(Vinarski-Peretz & Carmeli, 2011). Employees who believe that they have high organizational support (Jeung, 2011; Rich et al., 2010) are more confident that supervisory and coworker reactions to their work-related contributions will be supportive and positive, even when mistakes are made. A level of safety is developed in which employees feel safe to take risks, expand their knowledge and skills, and fully engage in their jobs (Dollard & Bakker, 2010). Jeung (2011) further identified perceived procedural justice, rewards and recognition, coworker relations, value congruence, and leadership type as key factors in developing psychological safety at the organizational level. On an individual level, extraversion, self-efficacy, self-esteem, and optimism are important correlates to engagement (Jeung, 2011).

Psychological availability. Kahn (1990) described psychological availability as a readiness to engage personally at a particular moment. Rich et al. (2010) referred to this availability as core self-evaluation. This concept relates to employees' ability to do their jobs. The more confident they are, the more likely they are to feel available and prepared to fully engage in the tasks at hand. Leaders can affect psychological availability by providing a caring workplace environment for employees (Vinarski-Peretz & Carmeli, 2011). Leadership style, as discussed previously, plays a crucial role in empowering employees and developing their sense of psychological availability (Tuckey et al., 2012).

Rich et al. (2010) discussed the positive correlations between the presence of the aforementioned three antecedents in organizations and higher levels of engagement. Research also has suggested that although influenced differently, these antecedents have positive effects on job engagement as well as organizational engagement and

commitment (Rich et al., 2010; Saks, 2006). A distinct mediatory relationship of engagement between value congruence, perceived organizational support, and core evaluations with task performance and organizational citizenship behaviors was observed by Rich et al.

Consequences of Engagement

Employees who are disengaged might exhibit signs of burnout (González-Romá et al., 2006). These signs include, but are not limited to, physical manifestations (headaches, gastrointestinal disorders, high blood pressure, sleep disturbances); emotional exhaustion and fatigue; diminished work capacity; and negative attitudes or behaviors (Maslach & Leiter, 2008). The positive consequences of engagement include higher levels of job involvement, enhanced job performance, job satisfaction, intrinsic motivation, improved organizational citizenship, and organizational commitment (Rich et al., 2010). Engaged employees are more determined to apply discretionary effort to their work (Pitt-Catsouphes & Matz-Costa, 2008).

Improved organizational outcomes. Because engaged employees display greater confidence (Rich et al., 2010); ability (Jeung, 2011); independence (Tuckey et al., 2012); creativity (Zhang & Bartol, 2010); and organizational commitment (de Villiers & Stander, 2011; Krishnan, 2003), organizations with engaged employees experience higher levels of customer satisfaction, productivity, and profitability, and lower turnover rates (Harter, Schmidt, & Hayes, 2002). It has also been found that engagement can have a significant impact on the financial returns of organizations (Xanthopoulou et al., 2009).

Increased job satisfaction. Jeung (2011) described engagement as a psychological state that can have a significant impact on performance. Engaged employees have better attitudes and are satisfied with their jobs. The more engaged employees become, the more satisfied they are with their jobs and individual performance. Conversely, the more satisfied they become, the more engaged they become (Saks, 2006). In effect, work engagement appears to be correlated positively to overall occupational well-being (Seppälä et al., 2008).

Summary and Transition

This chapter focused on the theoretical concepts supporting the effects of clinician manager leadership on the PE and engagement of employees. Leadership theory, including a more focused look at transformational, transactional, laissez-faire, and servant leadership theories; PE theory; and engagement theory were discussed.

In Chapter 3, I describe the setting, research design, and methodology used to examine the relationships of DCM leadership style and EI to team PE, individual PE, and employee engagement. Participant selection procedures; instrumentation; and data collection, analysis and interpretation methods are disclosed. Validity, ethical, and human protection issued also are discussed. I conclude Chapter 3 with a summary. In Chapter 4, I provide the results of the study. Quantitative MR and correlational analyses were conducted, and all relevant data are presented in textual and table format. Each RQ and hypothesis is addressed. In Chapter 5, I include a discussion of the findings, including theoretical and practical implications, some of the limitations discovered during the research process, and recommendations for future research.

Chapter 3: Research Method

Introduction

The purpose of this quantitative study was to determine whether DCM leadership style and EI affected team PE, individual PE, and employee engagement, and whether certain leadership styles are more effective in the DCM environment. DCMs are licensed health care providers who have received professional training to deliver dental services to patients; however, as part of their dental clinic position, managerial and leadership roles are subsequently assumed (Kippist & Fitzgerald, 2009). Although research has indicated that effective leadership is crucial to employee engagement and organizational success (Avolio et al., 2004; Babcock-Roberson & Strickland, 2010; Jeung, 2011; Zhang & Bartol, 2010), Fulop (2012) asserted that traditional leadership theories do not fit clinician managers. In addition, despite the necessity for leadership skills, attitudes, and abilities among clinician managers, dentists receive little to no leadership training in dental school (Chilcutt, 2009; Victoroff et al., 2009). In the current study, I add to what is known about the effects of clinician management in the health care setting. I also expand EI theory in leadership research as it pertains to clinicians, specifically DCMs, assuming leadership roles, the effects on their personally taking on such roles with little to no leadership training, and the effects on the individuals with whom they work and lead.

In this chapter, I detail the rationale for the research design and discusses the methodology. I also present participant selection procedures. I selected dental teams within the northern Utah region. Instrumentation methodology using validated assessments to measure leadership style, EI, team PE, individual PE, and employee

engagement is explained. Data collection, cleaning processes, data analysis using an MR approach, and interpretation methods are established. Validity, ethical, and human protection issues are discussed. The chapter concludes with a summary.

Research Design and Rationale

A quantitative analysis of the leadership style and EI of DCMs was conducted once approval from received from Walden University's Institutional Review Board to conduct the study (IRB approval #06-27-16-0055419). Quantitative assessments were used on selected DCMs and their associated team members to assess the relationship of DCM leadership style and EI to the team member variables of team PE, individual PE, and employee engagement.

In this study, each dental team, independent of other dental teams, was assessed for the influence of DCM leadership style on PE and engagement within the team. Osborne (2000) observed that the members of groups such as dental teams will tend to be more homogeneous in their responses than individuals who have been randomly sampled from a larger target population. A bivariate correlation was used to analyze the relationship between DCM leadership style and DCM EI using SPSS. The Pearson correlation coefficient generated from this analysis provided the strength of the relationship between the variables, in this case, leadership style and EI. The more reliable the responses were in the group, the more weight assigned to the group mean in estimating variances. Less reliable responses were given smaller weight. For this study, causal and intermediary relationships within and between dental teams regarding leadership style, EI, individual PE, team PE, and employee engagement were analyzed.

Research Questions and Hypotheses

I used the following RQs and hypotheses guide the study:

RQ1: Does DCM leadership style predict team PE?

H_{01a}: Transformational leadership style does not predict team PE.

H_{a1a}: Transformational leadership style predicts team PE.

H_{01b}: Transactional leadership style does not predict team PE.

H_{a1b}: Transactional leadership style predicts team PE.

H_{01c}: Laissez-faire leadership style does not predict team PE.

H_{a1c}: Laissez-faire leadership style predicts team PE.

H_{01d}: Servant leadership style does not predict team PE.

H_{a1d}: Servant leadership style predicts team PE.

DCM leadership style, as assessed by the MLQ and SLS, was used to predict team PE, as measured by the GPES. MR analysis of transformational, servant, transactional, and laissez-faire leadership styles on team PE was conducted to confirm whether the predictor variables of transformational, servant, transactional, and laissez-faire leadership styles were significant predictors of the criterion variable.

RQ2: Does DCM leadership style predict individual PE?

H_{02a}: Transformational leadership style does not predict individual PE.

H_{a2a}: Transformational leadership style predicts individual PE.

H_{02b}: Transactional leadership style does not predict individual PE.

H_{a2b}: Transactional leadership style predicts individual PE.

H_{02c}: Laissez-faire leadership style does not predict individual PE.

H_{a2c}: Laissez-faire leadership style predicts individual PE.

H_{02d}: Servant leadership style does not predict individual PE.

H_{a2d}: Servant leadership style predicts individual PE.

DCM leadership style, as assessed by the MLQ and SLS, was used to predict individual PE, as measured by the SPES. MR analysis of transformational, servant, transactional, and laissez-faire leadership styles on individual PE was conducted to confirm whether the predictor variables of transformational, servant, transactional, and laissez-faire leadership styles were significant predictors of the criterion variable.

RQ3: Does DCM leadership style predict employee engagement?

H_{03a}: Transformational leadership style does not predict employee engagement.

H_{a3a}: Transformational leadership style predicts employee engagement.

H_{03b}: Transactional leadership style does not predict employee engagement.

H_{a3b}: Transactional leadership style predicts employee engagement.

H_{03c}: Laissez-faire leadership style does not predict employee engagement.

H_{a3c}: Laissez-faire leadership style predicts employee engagement.

H_{03d}: Servant leadership style does not predict employee engagement.

H_{a3d}: Servant leadership style predicts employee engagement.

DCM leadership style, as assessed by the MLQ and SLS, was used to predict employee engagement, as measured by the UWES. MR analysis of transformational, servant, transactional, and laissez-faire leadership styles on employee engagement was conducted to confirm whether the predictor variables of transformational, servant, transactional, and laissez-faire leadership styles were significant predictors of the

criterion variable.

RQ4: Does DCM EI predict team PE, individual PE, or employee engagement?

H_{04a}: DCM EI does not predict team PE.

H_{a4a}: DCM EI predicts team PE.

H_{04b}: DCM EI does not predict individual PE.

H_{a4b}: DCM EI predicts individual PE.

H_{04c}: DCM EI does not predict employee engagement.

H_{a4c}: DCM EI predicts employee engagement.

DCM composite score of EI, as assessed by the MSCEIT, was used to predict team PE, individual PE, and employee engagement, as measured by the MLQ, SPES, and UWES, respectively. Regression analysis of DCM EI on team PE, individual PE, and employee engagement was conducted to confirm that the predictor variable of DCM EI was a significant predictor of the criterion variables.

RQ5: Does team PE predict individual PE and/or employee engagement?

H_{05a}: Team PE does not predict individual PE.

H_{a5a}: Team PE predicts individual PE.

H_{05b}: Team PE does not predict employee engagement.

H_{a5b}: Team PE predicts employee engagement.

Team PE, as measured by the GPES, was used to determine predictive correlations with individual PE and employee engagement, as assessed by the SPES and UWES, respectively. MR analysis of team PE on individual PE and employee engagement was conducted to confirm that team PE was a significant predictor of the

individual variables.

RQ6: Does DCM EI correlate with their leadership style?

H_{06a}: DCM EI does not correlate with transformational leadership style.

H_{a6a}: DCM EI correlates positively with transformational leadership style.

H_{06b}: DCM EI does not correlate with servant leadership style.

H_{a6b}: DCM EI correlates positively with servant leadership style

H_{06c}: DCM EI does not correlate with transactional leadership style.

H_{a6c}: DCM EI correlates negatively with transactional leadership style.

H_{06d}: DCM EI does not correlate with laissez-faire leadership style.

H_{a6d}: DCM EI correlates negatively with laissez-faire leadership style.

Composite DCM EI, as measured by the MSCEIT, was used to assess correlations with DCM leadership style, as assessed by the MLQ and SLS. Correlation analyses of DCM EI on transformational and servant leadership style were conducted to confirm that the predictor variable of EI had a positive and significant correlation with the criterion variables of transformational and servant leadership styles. Correlation analyses of DCM EI on transactional and laissez-faire leadership styles were conducted to confirm that the predictor variable of EI had a negative and significant correlation with the criterion variables of transactional and laissez-faire leadership styles.

Methodology

Population

The participants were DCMs and dental employees (i.e., dental assistants, hygienists, office managers, and other business office staff). Dentists provide services to

patients to maintain and restore dental health. They diagnose and treat problems associated with teeth, gums, and other parts of the mouth. Although specific services can be provided by dentists who specialize in various aspects of dentistry, general dentists often perform many of these services, including oral surgery, periodontics, endodontics, restorative and cosmetic dentistry, orthodontics, and pediatric dentistry. By offering these services, dentist can treat all conditions regarding patients' oral health.

Dental employees are involved in assisting with the execution of these services and providing business functions related to dental treatment. Dental assistants are key employees who assist the dentists providing dental care and services. Many functions can be delegated to assistants, allowing dentists to work more efficiently. Other supporting team members are involved in the business aspects of dental practices. They confirm appointments, coordinate insurance, and collect money from patients, to name but a few. These duties are essential to the business success of dental practices.

Dentists might own their own practices, partner with other dentists, be employed as associates for other dentists, or work for dental service organizations. Staff size can vary from a small staff of two or three employees to dozens. Dentists often deal with the management of dental teams and business practices, thus fitting the definition of DCM.

Sampling Procedures and Recruitment Strategy

A purposive sample design was the most appropriate choice for this study. A purposive sample, or judgment sample, facilitates the use of subjective judgment to select a representative sample from the target population. Because this study was centered on DCMs and team dynamics, it was reasonable to purposefully select the participants from

the dental profession. In addition, it was helpful to select professionals from different stages in their profession and business circumstances. As teams were selected, a minimum of one DCM and two team members (i.e., one clinical staff and one business office staff) qualified for the study. Team sizes less than this were excluded from the sample. Leadership in any setting is important, be it a solo practice, a group practice, or a corporately managed dentistry. The purpose of this study was to specifically examine DCMs and the team dynamics of dental teams.

The size of the sample was determined by first selecting an acceptable level of error margin. Typically, this margin is set at an alpha level of .05. In this study, the effect of leadership style and EI on team PE and employee engagement among DCMs and dental teams was assessed initially. A proper sampling design and sample size enhance the validity and generalizability of the study (Frankfort-Nachmias & Nachmias, 2008).

Opportunities to participate were announced to DCMs in the northern Utah region via network association contacts, e-mail, phone, and face-to-face contact. E-mail and phone number contact information was provided, along with a brief description of the purpose of the study and an invitation to respond with questions or desire to participate. DCMs from the region were informed that participation in the study was confidential and that all data gathered would not be disclosed in a way that would identify any dental practice or participant. As an incentive to participate, it was disclosed that generalized results of the study would be provided but that only aggregate results for the collective group were available to the dentists. The researcher's phone number and e-mail address were provided to participants who might have had more specific questions about being in

the study. A follow-up phone call was made to those interested in participating to ascertain proper fit for the study using the questionnaires in Appendices A and B.

Once the sample was established, an appointment was scheduled to meet with the DCMs with their teams to present the purpose and procedures of the study. Potential participants were verbally apprised of the confidential nature of the study and that employment status would not be affected by participation or nonparticipation. Packets for each participant containing instructions describing how to access the online assessments were provided. Participant information was gathered, including e-mails, in order to facilitate completion of the online assessments. I gave my personal contact information to the participants so that they could contact me at any time during the process. Informed consent forms were distributed and explained that by completing the surveys, they were giving implied consent. The participants had 2 weeks to complete the assessment forms.

Instrumentation and Operationalization of Constructs

MLQ. DCM leadership style was assessed using the MLQ (Avolio & Bass, 2014), which has been found effective in assessing transformational, transactional, and laissez-faire styles of leadership and was developed by Avolio and Bass (2014). The MLQ is available online and requires no certification for administration. The MLQ is a 36-item assessment based on a 5-point Likert scale of responses that range from 1 (*not at all*) to 5 (*frequently, if not always*) divided into six scales: charisma/inspirational, intellectual stimulation, individualized consideration, contingent reward, management-by-exception-active, and passive/avoidant (Avolio, Bass, & Jung, 1999). The reliabilities for each scale range from .63 to .92 and validity measurements exceed the recommended

cut-offs for adequate discriminant and convergent validity (Avolio et al., 1999). Samples used with this assessment have included business, political, student, medical, and nonprofit organizations.

SLS. Servant leadership style was assessed using the SLS (Liden et al., 2008). The SLS is a 28-item 7-point Likert scale of responses that range from 0 (*never*) to 6 (*always*), along with seven hypothesized factors of servant leadership: Reliabilities for each scale range from .76 to .86. The assessment can be reproduced for non-commercial research and educational purposes (Liden et al., 2008). Data from 80 leaders and 388 raters were used to test the internal consistency; confirm factor structure; and assess convergent, divergent, and predictive validity (Barbuto & Wheeler, 2006).

MSCEIT. EI was assessed using the MSCEIT (Mayer et al., 2003). It is a 141-item, self-assessment instrument with eight scales that has been shown to have adequate validity and reliability (Mayer et al., 2003). The test is based on the four branches of EI of perceiving emotions, using emotions to facilitate thought, understanding emotions, and managing emotions. Test-retest reliability was .82, and split-half reliability estimates ranged from .79 to .93 for general scoring. Predictive validity has been identified for job performance, leadership style, occupational choice, attachment style, academic success, and organizational behaviors (Mayer et al., 2002). The assessment has been used in business, leadership, and educational organizations.

GPES. Team PE was assessed using the 12-item GPES (Kirkman et al., 2004). This assessment uses a 7-point Likert scale of responses that range from 1 (*strongly disagree*) to 7 (*strongly agree*) and was originally developed by Kirkman and Rosen

(1999). Teams measured with this scale have been shown to have reliability scores ranging from .84 to .99, with an overall reliability of .93 (Kirkman et al., 2004). Intraclass correlation coefficients as high as .74 indicated that the team means for empowerment were stable (Kirkman et al., 2004).

SPES. The SPES is a 12-item assessment basted on a 7-point Likert scale of responses that range from 1 (*strongly disagree*) to 7 (*strongly agree*) measuring individual PE. The scale measures the four components of PE: meaning, competence, self-determination, and impact. The assessment has been used in organizational settings measuring PE in employees at the managerial and employee levels. Cronbach's alpha reliability coefficient for managerial samples was .72; employee samples measured at .62 (Spreitzer, 1995). Convergent and discriminant validity was found to be an excellent fit with managerial samples and moderate with lower level employee samples. The four assessment factors correlated highly with each other in both samples (Spreitzer, 1995).

UWES. The UWES (Schaufeli et al., 2006) was used to assess employee engagement. It is a common assessment used to measure work engagement. The UWES is a self-report questionnaire based on the three factors of engagement: vigor, dedication, and absorption (Schaufeli et al., 2006). All items are scored on a 7-point Likert scale of responses that range from 0 (*never*) to 6 (*always*) indicating the frequency that a participant experiences the feeling described in the assessment item. According to Seppälä et al. (2008), the construct validity of the UWES-9 is good. The UWES has been shown to be effective when applied to various working groups and even across countries (Schaufeli et al., 2006). Internal consistency of the short version of the UWES reported a

Cronbach's alpha measurement between .75 and .90 over the various countries tested, and the stability coefficients were reported between .57 and .73. This assessment has been used in business, health, and nonprofit organizations internationally.

Data Collection

Once the participants were selected, as described earlier, I communicated via phone with each DCM to clarify the requirements for participation and scheduled a meeting with each DCM and dental team. A written description of the study was forwarded via e-mail to the DCMs who had expressed an interest in joining the study. This document also was given to each team member. In addition, team members who were asked to participate were given the opportunity to not participate. I obtained a list of team members who were willing to participate, along with their contact information including phone numbers and e-mails. This list was compiled by the participating DCMs and delivered to me. Team members were then informed about the nature of the study, the voluntary nature of their participation, and their right to withdraw at any time without penalty. Each participant was given an information packet containing the description and purpose of the study, as well as instructions on how to access the online assessments. My contact information was provided in the packet for those who needed technical assistance completing the surveys. There were several occasions when the participants needed help accessing the survey or obtaining the correct team identification group numbers, so they contacted me via phone or e-mail. Informed consent forms were provided to all participants, who were asked to read the form before being advised that consent was implied if they completed the surveys. Some surveys were conducted through assessment

developer websites (MLQ, MSCEIT); the other assessments were facilitated through SurveyMonkey. All DCMs and team members completed the online assessments.

The expansive use of the Internet has provided an efficient environment for researchers to conduct web-based investigations (Ahern, 2005). Surveys are a widely used research tool and a particularly important measurement method in applied social research (Trochim, 2006). Some of the key advantages of using surveys, online or otherwise, is that the respondents can take the time needed to respond, administration usually is low cost, and the data can be processed quickly. The anonymity of the survey methodology is beneficial to researchers, especially those who might have other employment or peer relationships with the respondent pool. Upon completion of the surveys, I accessed the data online and transferred the data to Excel spreadsheets for analysis.

Data Analysis Plan

Upon receipt of the completed assessments, the data were transferred to Excel spreadsheets to obtain a visual representation of the data. This process facilitated an initial screening of the data, highlighting incorrect codes in a data set, blank cells or missing input, and extraneous inputs. The data in the Excel documents then were imported into SPSS. As reported by Odom and Henson (2002), SPSS is an effective software tool to screen the data. SPSS allowed me to identify any normality problems, outlier influences, or the presence of missing values. Data cleaning produced the most accurate and efficient estimates (Odom & Henson, 2002).

I then entered the data into SPSS in a grouped fashion. Grouped data occurs when "data are collected from multiple individuals in a group and the individual data are nested within that group" (O'Dwyer & Parker, 2014, p. 2). In this study, each individual was a member of 16 different groups, thus creating two levels of data. The first level reflected each of the 94 individual participants, and the second level represented the 16 different dental teams.

In SPSS, each individual was entered sequentially with a coded ID. The remaining data, including team affiliation, were then entered for each individual. To optimize the data as a function of statistical power, the data were analyzed at the individual or granular level (n = 94). The data were not analyzed at the group level (n = 16) because the sample size was too small and resulted in severe multicollinearity in the regression model. Therefore, I decided to not include team affiliation as a variable in any of the regression equations. However, given that each individual was tied to specific teams within the data set, a grouping structure was present throughout the data at the individual level.

I conducted an MR analysis to measure the magnitude and significance of hypothesized causal connections of leadership style and EI to team PE, individual PE, and employee engagement. A nested model approach, in which prior models are nested or contained within a subsequent model, was used. Four models per DV were designed for this study. For example, in regard to employee engagement as the DV, three separate reduced models were contained within the full model (i.e., the fourth model). Models 1, 2, and 3 contained regression equations for leadership styles, EI, and team PE,

respectively, onto employee engagement. In Model 4, all IVs are present. SPSS showed the statistical results, model summary, ANOVA, coefficients, and so on, as each block of variables was entered into the analysis.

Threats to Validity

One of the assumptions made in this study was that the conditions surrounding dentists and dental practice are generalizable to other health care or professional settings where management duties are expected of professionals who have been trained in other areas instead of management. Participants involved in self-report assessments can alter the validity of the study to the degree that lying, bias, or the desire- to look good to the researcher can skew the data.

Ethical Procedures

Modern technology has created many challenges for those professionals who are mandated to maintain client or participant confidentiality. Whenever the Internet or any other electronic medium is used, researchers either must become knowledgeable of the protocols regarding the storage of sensitive and confidential data or at least obtain the necessary technical assistance (Fisher, 2013). It is not as simple as locking a file cabinet. Now practitioners or researchers must consider using encrypted data transmission, password protection, and firewalls to protect confidential data and information. Use of the Internet for surveys, consultations, or even psychotherapy requires a higher level of sophistication to ensure confidentiality, just as would be done in face-to-face interactions (Fisher, 2013).

It also is important to maintain ethical standards that include providing informed

consent, avoiding harm, and ensuring confidentiality (Fisher, 2013). Each participant understood that participation in the study was voluntary and that withdrawal at any time without repercussion was a fundamental right. Because employees were asked to report their experiences with DCMs who likely were their employers, significant effort was taken to ensure that employees were not harmed in any way by providing honest responses to the survey items. This led to the importance of providing absolute confidentiality to each participant in the study. An informed consent describing these important issues was distributed to all participants.

Summary and Transition

In Chapter 3, I discussed the planned use of a quantitative approach to capture and analyze data regarding the clinician management of dental offices. Data provided by the dental teams from the northern Utah area were analyzed. These analyses were accomplished using MR to determine whether there was a relationship of DCM leadership style and EI to team PE, individual PE, and employee engagement. The assessments used were described, and the data were captured using validated instruments delivered via the Internet. The data were then analyzed using SPSS. Threats to validity were described, and plans to protect participants and other ethical considerations were disclosed. In Chapter 4, I present the results of the study. In Chapter 5, I include a discussion of the findings, including theoretical and practical implications, some of the limitations discovered during the research process, and recommendations for future research.

Chapter 4: Results

Introduction

In Chapter 4, I present the results of this quantitative study to determine whether DCMs' leadership style and EI influenced support team dynamics in terms of team PE, individual PE, and employee engagement. At the time of the study, the participants were employed within a larger network of dental practices. The DCMs took leadership style and EI assessments, and the support team members took PE and employee engagement assessments. Participation rates, sample demographics, and descriptive statistics for the respective assessments, along with tests for assumptions for the respective analyses, are provided. The MR and correlational analyses of the leader-team groups are presented to systematically to address the RQs and their associated hypotheses.

Response Rate

The target population comprised 194 team members across 17 dental teams, which included the DCMs. A total of 122 team members made up the 17 dental teams, with each team having a DCM and various dental team members. Of those participants, only 110 filled out the instruments completely; 12 participants were eliminated from the participant pool. Among those eliminated was one entire dental team because of the DCM not sufficiently completing the MSCEIT to render a total EI raw score. The final participant pool comprised 16 dental teams, 16 DCMs, and 94 participants ($N = 110$). Each team had three to 16 members, with a median of six members per team.

Ritchey (2008) noted that percentages and frequencies are appropriate descriptive statistics to report response rates. Table 1 provides a breakout of the response rate by

dental team. The column showing potential total participants indicates the number of individuals who were sent a request to participate, and the next column with the actual number of participants denotes those who completed the surveys. Each team participation percentage was calculated, as well as the relative participation percentage compared to other teams in the sample. Team 208 had the highest response rate at 100%. Team 201 had the lowest response rate at 42.8%. Team 205 had the highest number of actual participants (14.5%) with only a 45.7% participation rate, and teams 201 and 206 had the lowest number of respondents (2.7%) compared to the rest of the teams. The overall participation rate relative to potential participant pool was 56.7%.

Table 1

Dental Team Participation Percentages and Frequencies

Team affiliation	Potential total no. of participants*	Actual no. of participants	Team participation %	Relative team participation %
200	26	14	53.8	12.7
201	7	3	42.8	2.7
202	10	5	50.0	4.5
203	13	8	61.5	7.3
204	7	6	85.7	5.5
205	35	16	45.7	14.5
206	4	3	75.0	2.7
207	10	6	60.0	5.5
208	5	5	100.0	4.5
209	16	7	43.8	6.4
210	9	8	88.9	7.3
212	12	7	58.3	6.4
214	9	6	66.7	5.5
215	5	4	80.0	3.6
216	11	5	45.5	4.5
217	10	7	70.0	6.4
N	194	110	56.7	100.0

**Note*. Team members included the dental clinician managers.

Sample Demographics

Table 2 presents demographic information about the DCMs in regard to leadership training experience, tenure as dental practitioners, use of office managers, and number of dentists working in the practices. Although some DCMs indicated that they had some leadership training while in dental school, all reported that it was minimal. At most, they attended a lecture or two on leadership and dental practice management. DCMs who reported having received formal leadership training indicated that it was in the form of seminars and continuing education sessions at dental conventions and from various dental consultant groups. Only one DCM indicated that he had earned a master's degree in business administration prior to attending dental school. A total of 56.2% of the participating DCMs had more than 10 years of dental practice experience; 18.8% had between 5 and 10 years of experience, and the remaining 25.0% had less than 5 years of experience. The number of dentists practicing in each office, as well as a potential unique variable that could impact team dynamics, was noted.

Table 2

DCM Demographics

Team affiliation No.	Dental school leadership training	Subsequent formal leadership training	How long in dental practice	Employ office manager	No. of dentists in office
200	No	Yes	10+	Yes	4
201	No	Yes	10+	Yes	1
202	Yes	Yes	1-5	No	2
203	Yes	No	1-5	Yes	2
204	No	No	1-5	No	3
205	No	No	5-10	No	9
206	Yes	Yes	10+	Yes	4
207	No	Yes	5-10	Yes	2
208	Yes	No	10+	Yes	4
209	No	Yes	10+	No	3
210	No	No	10+	Yes	3
212	Yes	No	5-10	Yes	2
214	No	No	10+	Yes	3
215	Yes	No	1-5	No	2
216	Missing	Missing	10+	No	3
217	Yes	Yes	10+	No	3

Table 3 depicts the type of jobs, total counts, and percentages that team members performed. Business office personnel, such as receptionists, billing coordinators, or office managers, accounted for 22.1% of the participants. Dental assistants or hygienists accounted for 28.2%. Other dental care providers, such as DCMs, other dentists or hygienists, comprised 37.3% of the participant pool. The remaining participants indicated that they had some other roles in the dental practices or did not answer the question. As previously stated, participating dental teams ranged from three to 16 members, with an average of 5.9 and median of six members per team. Dental teams generally comprise DCMs, dental assistants, dental hygienists, and business office staff.

Table 3

Job Descriptions of Dental Team Members

Job	Frequency	%
DCM	16	14.5
Dental assistant	29	26.4
Dentist	8	7.3
Financial coordinator/Billing	13	11.8
Hygiene assistant	2	1.8
Hygienist	17	15.5
Office manager	9	8.2
Other	5	4.5
Receptionist	10	9.1
Total	109	99.1
Missing	1	0.9
Total	110	100.0

Descriptive Statistics

Ritchey (2008) noted that for continuous variables, means and standard deviations are the appropriate descriptive statistics to report. Means and standard deviations calculated for DCM leadership style and EI are presented in Table 4. Midpoint of the transformational leadership scale was 2.0, and the mean score of 3.16 was above the midpoint, suggesting that respondents worked for DCMs who had higher than average levels of transformational leadership. Midpoint of the Transactional Leadership scale was 2.0, and the mean score of 2.20 was above the midpoint, suggesting that respondents worked for DCMs who had higher than average levels of transactional leadership. Midpoint of the Laissez-Faire Leadership scale was 2.0, and the mean score of 1.10 was below the midpoint, suggesting that respondents worked for DCMs who had lower than average levels of laissez-faire leadership. Midpoint of the Servant Leadership scale was 4.0, and the mean score of 5.10 was above the midpoint, suggesting that participants had higher than average levels of servant leadership. A comparison of the mean scores for

laissez-faire leadership, transactional leadership, and transformational leadership indicated that transformational leadership was the most frequent type of leadership encountered by the participants. The EI raw total score was rated on a scale of 0 to 1, with a midpoint of 0.5 and a mean score of 0.52, which was slightly above the midpoint, suggesting that participants had slightly higher than average levels of EI.

Table 4

DCM Leadership Style and EI Means and Standard Deviations

Variable	*M*	*SD*	Min.	Max.
EI raw total score	0.52	0.03	0	1
Servant leadership scale	5.10	1.03	1	7
Laissez-faire leadership scale	1.10	0.47	0	4
Transactional leadership scale	2.20	0.49	0	4
Transformational leadership scale	3.16	0.56	0	4

Note. $n = 94$

Figure 3 compares the mean scores of the 16 DCMs for transformational leadership style. DCM 215 had the highest mean score at 4.23, and DCM 214 had the lowest mean score at 2.01. Scores ranged from 2.01 to 4.23 ($M = 3.16$, $SD = 0.56$).

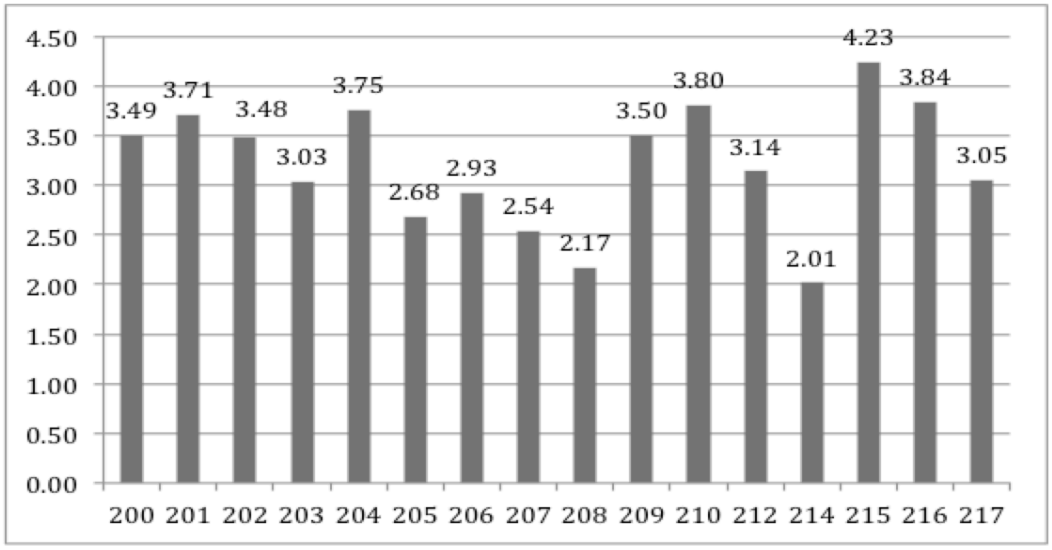

Figure 3. Transformational leadership scores for DCMs.

Figure 4 compares the mean scores of the 16 DCMs for transactional leadership style. DCM 207 had the highest score at 3.72, and DCM 208 had the lowest score at 1.64. Scores ranged from 1.64 to 3.72 (M = 2.20, SD = 0.49).

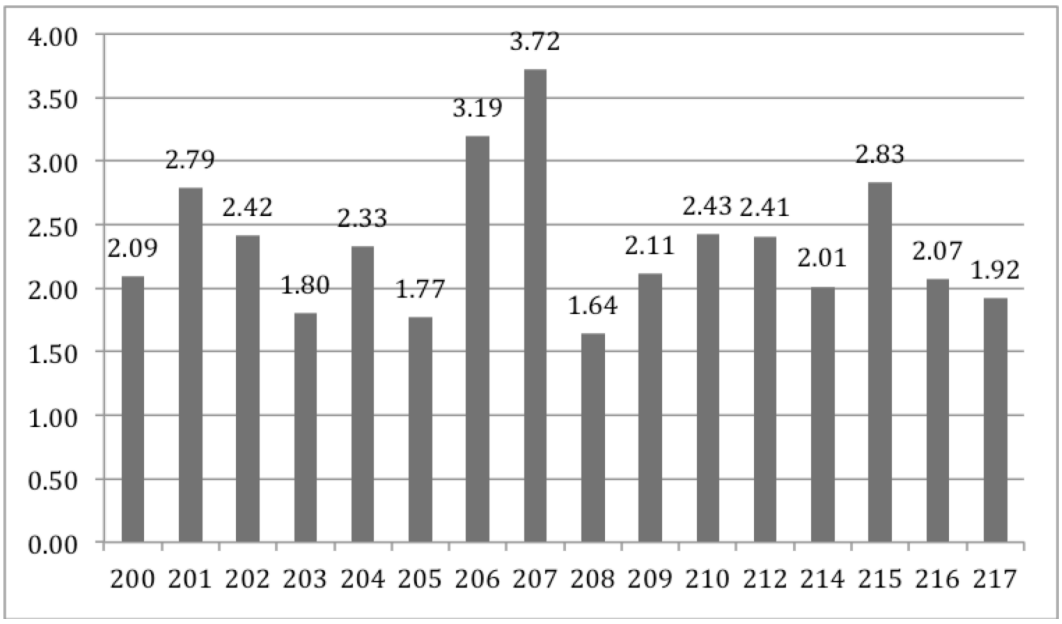

Figure 4. Transactional leadership scores for DCMs.

Figure 5 compares the mean scores of the 16 DCMs for laissez-faire leadership style. DCM 206 had the highest score at 2.98, and DCMs 204 and 201 had the lowest scores of 0.74. Scores ranged from 0.74 to 2.98 (M = 1.10, SD = 0.47).

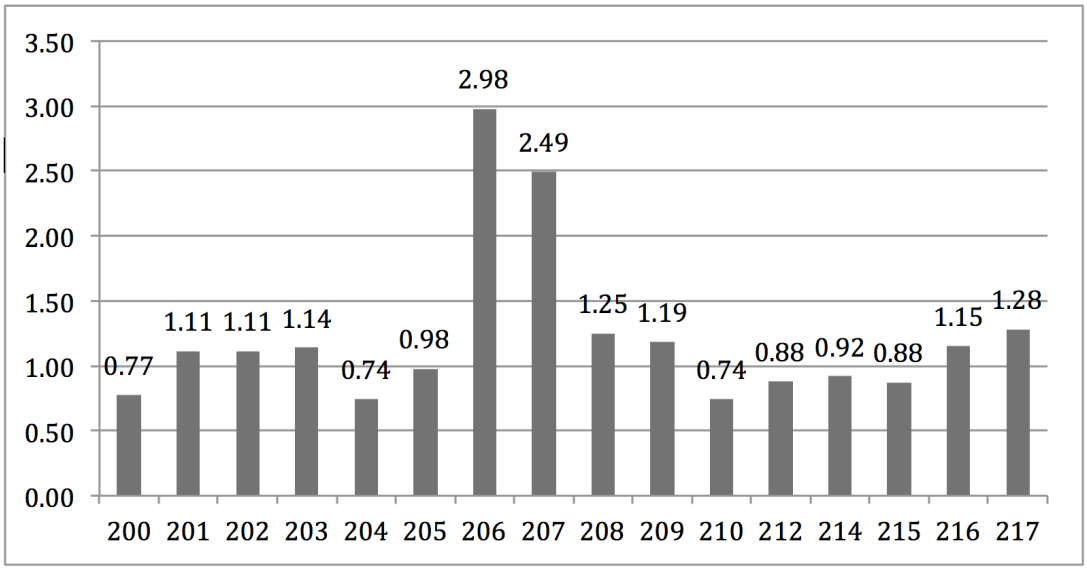

Figure 5. Laissez-faire leadership scores for DCMs.

Figure 6 compares the mean scores of the 16 DCMs for servant leadership style. DCM 215 had the highest score at 6.58, and DCM 214 had the lowest score at 3.85. Scores ranged from 3.85 to 6.58 ($M = 5.10$, $SD = 1.03$).

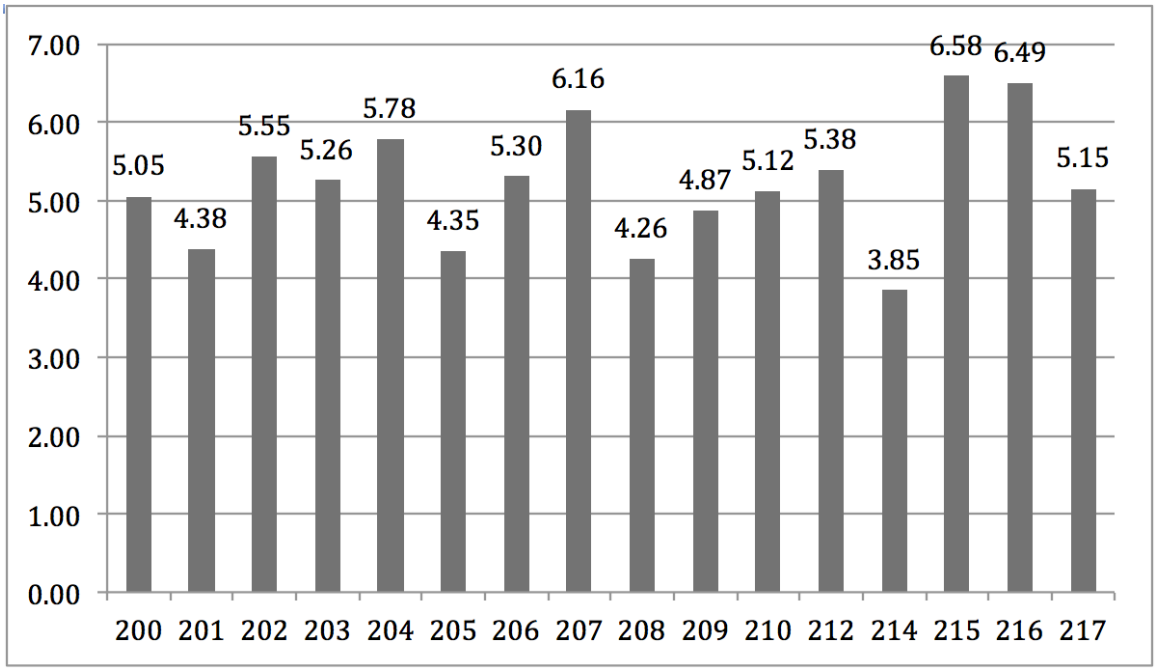

Figure 6. Servant leadership scores for DCMs.

Means and standard deviations were calculated for team member variables, team PE, individual PE, and employee engagement (see Table 5). Midpoint of the GPES was 4.0, and the mean score of 5.86 was above the midpoint, suggesting that participants had higher than average levels of team PE. Cohen's Kappa was run to determine whether there was agreement among all participants in relation to team PE. The interrater reliability among participants for team PE had substantial agreement at $\kappa = 0.903$ ($p < .000$), 95% CI (0.864, 0.932). Midpoint of the Individual Psychological Empowerment Scale was 4.0, and the mean score of 5.66 was above the midpoint, suggesting that participants had higher than average levels of individual PE. Midpoint of the Employee Engagement scale was 3.0, and the mean score of 4.47 was above the midpoint, suggesting that participants had higher than average levels of employee engagement.

Table 5

Employee Engagement, Individual PE, and Team PE Means and Standard Deviations

Variable	*M*	*SD*	Min	Max
Employee engagement scale	4.47	0.73	0	6
Individual psychological empowerment scale	5.66	0.85	1	7
Team psychological empowerment scale	5.86	0.75	1	7

Note. $n = 94$

Table 6 presents the results of a Pearson correlational analysis of all variables under investigation. Ritchey (2008) noted that for continuous variables, a Pearson correlational analysis is appropriate to discover bivariate relationships among the variables. Statistically significant correlations are flagged in the table; two asterisks identify a correlation that is significant beyond the .01 alpha level; a single asterisk

denotes a correlation that is significant beyond the .05 alpha level, but not at the .01 alpha level. The sign of a correlation (positive or negative) indicates the direction of the correlation.

Table 6

Pearson Correlation Results of Research Variables

Measure	1	2	3	4	5	6	7	8
1. Individual PE	1.00							
2. Employee	0.67**	1.00						
3. Servant	0.47**	0.53**	1.00					
4. Laissez-faire	-0.10	-0.02	0.176	1.00				
5. Transactional	0.20	0.23*	0.39**	0.62**	1.00			
6. Transformational	0.37**	0.30**	0.41**	-0.34**	0.20	1.00		
7. EI	-0.14	-0.17	-0.39**	-0.24*	-0.37**	-0.42**	1.00	
6. Team PE	0.59**	0.59**	0.57**	0.06	0.26*	0.41**	-0.21*	1.00

Note. *p <.05, **p < .01, two-tailed tests. n = 94

Test of the Assumptions

Allison (1999) identified several assumptions that must be met in multiple linear regression: linearity, homoscedasticity, independence of errors, normality of errors, and multicollinearity. The first assumption, linearity, states that the relationships of the variables under investigation are linear in nature. The way to investigate whether this assumption holds is to check the plot of the regression standardized residuals, or the normal P-P plot. As long as a linear trend is evident in the plot, the assumption of linearity is met (Mertler & Vannatta, 2010). The normal P-P plot in Figures 7 to 9 shows that this assumption was met for all three DVs in the study.

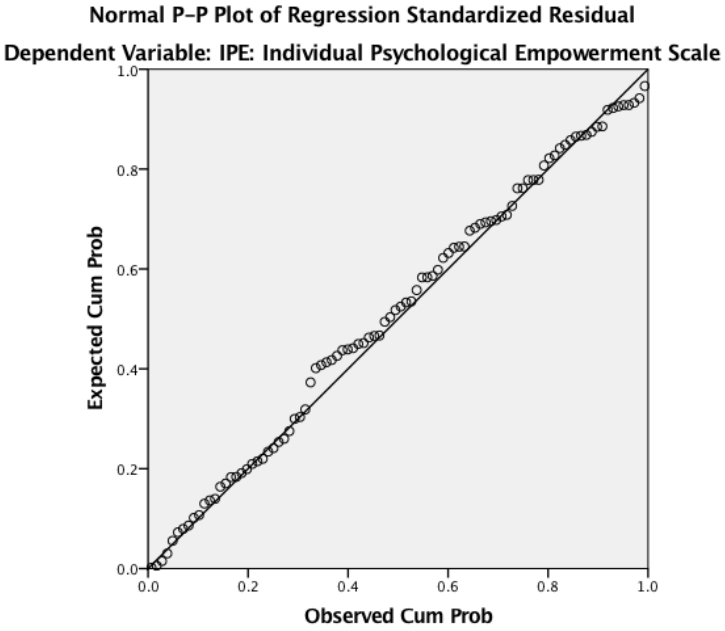

Figure 7. Normal P-P plot with individual PE as DV.

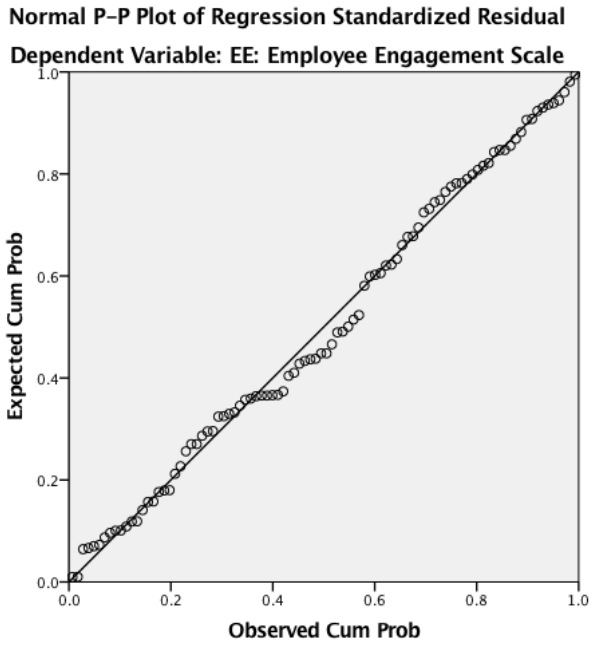

Figure 8. Normal P-P plot with employee engagement as DV.

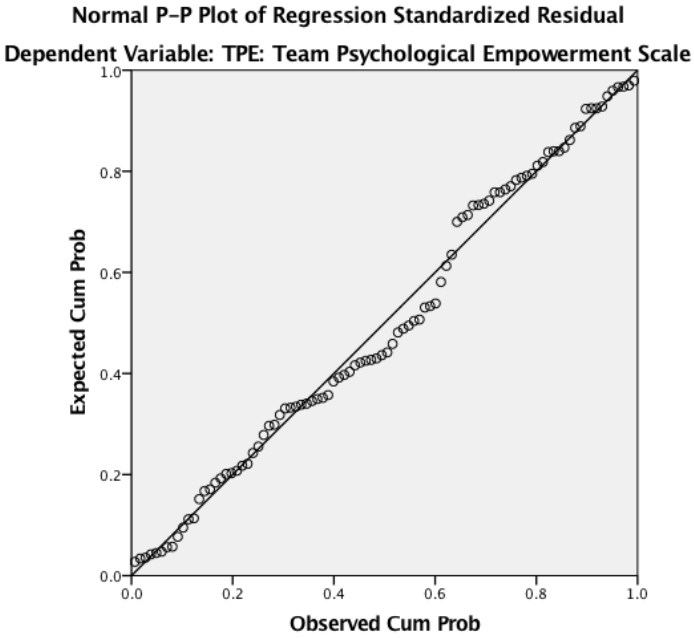

Figure 9. Normal P-P plot with team PE as DV.

The second assumption, homoscedasticity, confirms that the degree of random noise (or error) in the regression equation remains relatively constant or homoscedastic (Allison, 1999). The Breusch-Pagan Test (Breusch & Pagan, 1979) is essentially a chi-square test for heteroscedasticity. If the value of chi-square is statistically significant, then the data are considered heteroscedastic, and corrective measures are required. The Breusch-Pagan test was statistically nonsignificant when individual PE was used as a DV ($\chi^2 = 6.780$, $df = 6$, $p = .342$); when employee engagement was used as a DV ($\chi^2 = 8.669$, $df = 6$, $p = .193$); and when team PE was used as a DV ($\chi^2 = 4.861$, $df = 5$, $p = .433$). This assumption was met.

The third assumption, independence of errors, confirms that the disturbance terms in the regression equation are uncorrelated. This assumption is checked via the Durbin-Watson statistic, which ranges from 0 to 4 and has a midrange value of 2. As a general

rule, values of the Durbin-Watson statistic closer to 2 indicate independence of errors; values below 1 and above 3 suggest correlation of errors (Gujarati, 2003). The Durbin-Watson statistic for the equation where individual PE was used as a DV was 1.955; for employee engagement, the statistic was 1.983; for team PE, the statistic was 2.093. The assumption was met.

The fourth assumption, normality of errors, is based on the understanding that all errors are normally distributed in a regression equation. As Allison (1999) noted, this assumption is critical only when there are fewer than 100 cases in a sample and that as long as all other assumptions are met, the violation of this assumption can be discounted. The Shapiro-Wilk test of the standardized residuals is used to check this assumption (Shapiro & Wilk, 1965). The value of the test was statistically significant for the equation when individual PE was used as a DV (.971, $df = 94$, $p < .034$); when employee engagement was used as the DV (.979, $df = 94$, $p = .143$); and when team PE was used as a DV (.967, $df = 94$, $p = .018$). This assumption was not met; however, given that the overall sample was nearly equal to 100 and that all other assumptions were met, corrective action is unnecessary.

As Allison (1999) stated, multicollinearity is not a violation of the assumptions of regression per se; however, multicollinearity does make it difficult to find statistically significant coefficients within a regression model. Multicollinearity is typically checked by calculating variance inflation factors, or VIFs. A VIF of 10 or greater typically indicates potential multicollinearity (Anderson, Sweeney, & Williams 2002). All VIFs in all modes in all samples were under 3.0. This assumption was met.

Hypothesis Testing

Multiple regression analyses were conducted to examine the predictability of the DVs (individual PE and employee engagement) based on the influences of the IVs (leadership style, EI, and team PE). An MR approach was used to estimate this model. Individual data were nested within team data; in addition, variables were entered into the equation in blocks to progress in a hierarchical fashion toward the final model that contained all IVs. Results are presented at the granular level, which optimized sample size within the equation.

Research Question 1

RQ1: Does DCM leadership style predict team PE? Table 7 presents the results of the multiple linear regression of the DV of team PE onto the leadership style variables. An MR approach was used to estimate this model. Individual data were entered into the equation in blocks to progress toward the final model that contained all IVs. Results are presented at the granular level, which optimized sample size within the equation.

The omnibus F test was statistically significant, $F = 12.784$, $df = 4, 89$, $p < .001$. As such, decomposition of effects within the regression model was initiated. The coefficient of determination (adjusted R^2 value) was .336, meaning that 33.6% of the variation in the DV of team PE was due to the IVs of transformational leadership, transactional leadership, laissez-faire leadership, and servant leadership. Among the four IVs, servant leadership and transformational leadership emerged as statistically significant predictors of the DV. The positive unstandardized coefficient of the Servant Leadership Scale ($B = 0.339$, $p < .001$) showed that as servant leadership increased, Team

PE increased. The positive unstandardized coefficient of the Transformational Leadership scale ($B = 0.333$, $p < .037$) showed that as transformational leadership increased, Team PE increased. Of the four leadership styles, servant leadership was significantly and positively related to team PE at the $p < .001$ level, and transformational leadership was significantly and positively related to Team PE at the $p < .05$ level. Transactional and laissez-faire leadership styles did not significantly contribute to predicting team PE. Therefore, servant leadership and transformational leadership were predictive of team PE and supported Alternative Hypotheses 1a and 1d.

Table 7

Regression Analysis of Team PE Onto Leadership Style Variables

Variable	*B*	*SE(B)*	*Beta*	*p*
Constant	3.025	0.470		.000
Servant leadership scale	0.339	0.073	0.466	.000
Laissez-faire leadership scale	0.135	0.218	0.085	.538
Transactional leadership scale	-0.044	0.200	-0.029	.825
Transformational leadership scale	0.333	0.158	0.249	.037
n	94			
F	12.784			.000
R^2	0.336			

The alternative hypotheses for RQ1 were as follows: Transformational, servant, transactional, and/or laissez-faire leadership styles predict team PE. Based on the analyses, Alternative Hypotheses 1a and 1d are supported for the prediction of team PE by servant leadership style and transformational leadership style when controlling for all leadership styles and EI. It also is the case that servant leadership and transformational leadership predict team PE when controlling only for the four different types of leadership style. Transactional leadership and laissez-faire leadership do not significantly contribute to the prediction of team PE in any of the models.

Research Question 2

RQ2: Does DCM leadership style(s) predict individual PE? Table 8 presents the results of the multiple linear regression of the DV of individual PE onto the IVs. An MR approach was used to estimate this model. Individual data were entered into the equation in blocks to progress toward the final model that contained all IVs. Results are presented at the granular level, which optimized sample size within the equation.

The omnibus F test was statistically significant, $F = 8.763$, $df = 4, 89$; $p < .001$. As such, decomposition of effects within the regression model was initiated. The coefficient of determination (adjusted R^2 value) was .250, meaning that 25.0% of the variation in the DV of individual PE was due to the IVs of transformational leadership, transactional leadership, laissez-faire leadership, and servant leadership. Among the IVs, servant leadership emerged as a statistically significant predictor of the DV of individual PE. The positive unstandardized coefficient of the Servant Leadership scale ($B = 0.342$, $p < .001$) showed that as servant leadership increased, individual PE increased. Transformational, transactional, and laissez-faire leadership styles did not significantly contribute in predicting individual PE. Therefore, servant leadership supported Alternative Hypothesis 2d and was predictive of individual PE.

Table 8

Regression Analysis of Individual PE Onto Leadership Style Variables

Variable	*B*	*SE(B)*	*Beta*	*p*
Constant	3.418	0.566		.000
Servant leadership scale	0.342	0.088	0.415	.000
Laissez-faire leadership scale	-0.480	0.262	-0.268	.071
Transactional leadership scale	0.322	0.241	0.186	.185
Transformational leadership scale	0.101	0.190	0.067	.595
n	94			
F	8.763			.000
R^2	0.283			

An additional regression including all IV effects on individual PE was conducted. Table 9 provides the results for this analysis. The omnibus *F* test for all IVs collectively was statistically significant, $F = 10.341$, $df = 6, 87$; $p < .001$. As such, decomposition of effects within the regression model was initiated. The coefficient of determination (adjusted R^2 value) was .376, meaning that 37.6% of the variation in the DV of individual PE was due to the IVs of transformational leadership, transactional leadership, laissez-faire leadership, servant leadership, EI, and team PE. Among the six independent predictor variables, team PE emerged as a statistically significant predictor of the DV. The positive unstandardized coefficient of the Team Psychological Empowerment Scale ($B = 0.117$, $p < .001$) showed that as team PE increased, individual PE increased.

Table 9

Regression Analysis of Individual PE Onto All IVs

Variable	*B*	*SE(B)*	*Beta*	*p*
Constant	1.381	1.880		.465
Servant leadership scale	0.171	0.091	0.207	.063
Laissez-faire leadership scale	-0.529	0.253	-0.295	.040
Transactional leadership scale	0.342	0.220	0.198	.123
Transformational leadership scale	-0.048	0.198	-0.032	.808
EI raw total score	0.730	2.776	0.027	.793
Team psychological empowerment scale	0.515	0.117	0.455	.000
n	94			
F	10.341			.000
R^2	0.416			

The alternative hypotheses for RQ2 were as follows: Transformational, servant, transactional, and/or laissez-faire leadership styles predict individual PE. Based on the analyses, laissez-faire leadership style and team PE were supported for the prediction of individual PE when controlling for all variables. It also is the case that servant leadership style predicts individual PE when controlling for the four different types of leadership style. Transformational leadership and transactional leadership styles and EI do not contribute significantly in predicting individual PE in any of the models. However, laissez-faire leadership style is significantly and negatively predictive of PE, suggesting that as laissez-faire leadership is used, PE decreases.

Research Question 3

RQ3: Does DCM leadership style(s) predict employee engagement? Table 10 presents the results of the multiple linear regression of the DV of employee engagement onto the IVs. An MR approach was used to estimate this model. Individual data were entered into the equation in blocks to progress toward the final model that contained all IVs. Results are presented at the granular level, which optimized sample size within the

equation.

The omnibus *F* test was statistically significant, $F = 9.625$, $df = 4, 89$; $p < .001$. As such, decomposition of effects within the regression model was initiated. The coefficient of determination (adjusted R^2 value) was .271, meaning that 27.1% of the variation in the DV of employee engagement was due to the IVs of transformational leadership, transactional leadership, laissez-faire leadership, and servant leadership. Among the four IVs, servant leadership emerged as a statistically significant predictor of the DV. The positive unstandardized coefficient of the Servant Leadership scale ($B = 0.355$, $p < .001$) showed that as servant leadership increased, employee engagement increased. Of the four leadership styles, servant leadership style was significantly and positively related to employee engagement at the $p < .001$ level. Transformational, transactional, and laissez-faire leadership styles did not significantly contribute in predicting employee engagement. Therefore, servant leadership supported Alternative Hypothesis 3d and was predictive of employee engagement.

Table 10

Regression Analysis of Employee Engagement Onto Leadership Style Variables

Variable	*B*	*SE(B)*	*Beta*	*p*
Constant	2.491	0.482		.000
Servant leadership scale	0.355	0.075	0.499	.000
Laissez-faire leadership scale	-0.322	0.223	-0.208	.154
Transactional leadership scale	0.245	0.205	0.164	.235
Transformational leadership scale	-0.006	0.162	-0.004	.973
n	94			
F	9.625			.000
R^2	0.302			

An additional regression including all IVs effect on employee engagement was conducted. Table 11 provides the results of this analysis. The omnibus *F* test was

statistically significant, $F = 10.658$, $df = 6, 87$; $p < .001$. As such, decomposition of effects within the regression model was initiated. The coefficient of determination (adjusted R^2 value) was .384, meaning that 38.4% of the variation in the DV of employee engagement was due to the IVs of transformational leadership, transactional leadership, laissez-faire leadership, servant leadership, EI, and team PE. Among the six IVs, servant leadership and team PE emerged as statistically significant predictors of employee engagement. The positive unstandardized coefficient of the Servant Leadership scale ($B = 0.296$, $p < .01$) showed that as servant leadership increased, employee engagement increased. The positive unstandardized coefficient of the Team PE scale ($B = 0.101$, $p < .001$) showed that as team PE increased, employee engagement increased.

Table 11

Regression Analysis of Employee Engagement Onto All IVs

Variable	*B*	*SE(B)*	*Beta*	*p*
Constant	1.175	1.613		.468
Servant leadership scale	0.210	0.078	0.296	.008
Laissez-faire leadership scale	-0.378	0.217	-0.244	.085
Transactional leadership scale	0.264	0.188	0.177	.166
Transformational leadership scale	-0.147	0.170	-0.112	.389
EI raw total score	0.032	2.381	0.001	.989
Team psychological empowerment scale	0.428	0.101	0.438	.000
n	94			
F	10.658			.000
R^2	0.424			

The alternative hypotheses for RQ3 was as follows: Transformational, servant, transactional, and/or laissez-faire leadership styles predict employee engagement. Based on the analyses, Alternative Hypothesis 3d was supported for the prediction of employee engagement by servant leadership style when controlling for all leadership styles, team PE, and EI. It also is the case that only servant leadership style significantly predicts

employee engagement when controlling for the four different types of leadership style. Transformational leadership style, transactional leadership style, and laissez-faire leadership style did not significantly contribute in predicting employee engagement in any of the models.

Research Question 4

RQ4: Does DCM EI predict team PE, individual PE, or employee engagement? The first alternative hypothesis for RQ4 was as follows*:* DCM EI predicts team PE. Based on the analyses, Alternative Hypothesis 4a is supported for the prediction of team PE by DCM EI. Table 12 indicates the findings relevant to EI and team PE. The omnibus *F* test was statistically significant, $F = 4.360$, $df = 1, 92$; $p < .05$. The coefficient of determination (adjusted R^2 value) was .035, meaning that 3.5% of the variation in the DV of team PE was due to the IV of EI. The negative unstandardized coefficient of the EI ($B = -5.069$, $p < .050$) showed that as EI increased, team PE decreased. EI was negatively and significantly related to team PE at the $p < .05$ level.

Table 12

Regression Analysis of Team PE Onto EI

Variable	*B*	*SE(B)*	*Beta*	*p*
Constant	8.486	1.262		.000
EI raw total score	-5.069	2.428	-0.213	.040
n	94			
F	4.360			.040
R^2	0.045			

The second alternative hypothesis for RQ4 was as follows: DCM EI predicts individual PE. Based on the analyses, Alternative Hypothesis 4b is not supported for the prediction of individual PE by DCM EI. Table 13 indicates the findings relevant to EI

and individual PE. The omnibus *F* test for EI was statistically nonsignificant, $F = 1.829$, $df = 1, 92$; $p = .180$. As such, the regression model was not relevant and was not analyzed.

Table 13

Regression Analysis of Individual PE Onto EI

Variable	*B*	*SE(B)*	*Beta*	*p*
Constant	7.619	1.449		.000
EI raw total score	-3.770	2.788	-0.140	.180
n	94			
F	1.829			.180
R^2	0.019			

Alternative Hypothesis 4c was as follows: DCM EI predicts employee engagement. Based on the analyses, the hypothesis is not supported for the prediction of employee engagement by DCM EI. Table 14 indicates the findings relevant to EI and employee engagement. The omnibus *F* test was statistically nonsignificant, $F = 2.621$, $df = 1, 92$; $p = .109$. As such, the regression model was not relevant and was not analyzed.

Table 14

Regression Analysis of Employee Engagement Onto EI

Variable	*B*	*SE(B)*	*Beta*	*p*
Constant	6.482	1.245		.000
EI raw total score	-3.879	2.396	-0.166	.109
n	94			
F	2.621			.109
R^2	0.028			

Research Question 5

RQ5: Does team PE predict individual PE and/or employee engagement? Table 15 indicates the findings relevant to team PE and individual PE. The omnibus *F* test for Team PE was statistically significant, $F = 48.038$, $df = 1, 92$; $p < .001$. As such, the

regression model was initiated. The coefficient of determination (adjusted R^2 value) was .336, meaning that 33.6% of the variation in the DV of individual PE was due to the IV of team PE. The positive unstandardized coefficient of the GPES ($B = 0.664$, $p < .001$) showed that as team PE increased, individual PE increased. Team PE was positively and significantly predictive of individual PE at the $p < .001$ level. Alternative Hypothesis 5a was as follows: Team PE predicts individual PE. Based on the analysis, the hypothesis is supported for the prediction of individual PE by team PE.

Table 15

Regression Analysis of Individual PE Onto Team PE

Variable	*B*	*SE(B)*	*Beta*	*p*
Constant	1.777	0.565		.002
Team PE	0.664	0.096	0.586	.000
n	94			
F	48.038			.000
R^2	0.343			

Table 16 indicates the findings relevant to team PE and employee engagement. The omnibus *F* test was statistically significant, $F = 49.163$; $df = 1, 92$; $p < .001$. As such, the regression model was initiated. The coefficient of determination (adjusted R^2 value) was .341, meaning that 34.1% of the variation in the DV of employee engagement is due to the IV of team PE. The positive unstandardized coefficient of the GPES ($B = 0.577$, $p < .001$) showed that as team PE increased, employee engagement increased. Team PE was positively and significantly predictive of employee engagement at the $p < .001$ level. The second alternative hypothesis for RQ5 was as follows*:* Team PE predicts employee engagement. Based on the analysis, the hypothesis is supported for the prediction of employee engagement by team PE.

Table 16

Regression Analysis of Employee Engagement Onto Team PE

Variable	*B*	*SE(B)*	*Beta*	*p*
Constant	1.089	0.486		0.027
Team PE	0.577	0.082	0.590	0.000
n	94			
F	49.163			0.000
R^2	0.348			

Research Question 6

RQ6: Does DCM EI correlate with their leadership style? There was a significant negative relationship between DCM EI and transformation leadership style, $r(92) = -.423$, $p < .001$ (see Table 17). The correlation had a moderate effect size. There was a significant negative relationship between DCM EI and servant leadership style, $r(92) = -.391$, $p < .001$. The correlation had a moderate effect size. Both transformational leadership and servant leadership styles were moderately correlated with EI, but the correlation was negative.

There was a significant negative relationship between DCM EI and transactional leadership style, $r(92) = -.366$, $p < .001$. The correlation had a moderate effect size. There was a significant negative relationship between DCM EI and laissez-faire leadership style, $r(92) = -.236$, $p < .001$. The correlation had a small effect size. Although the correlation for transactional leadership and laissez-faire leadership styles was moderate and small, respectively, both leadership styles were correlated with EI, but the correlation is negative.

Table 17

Pearson Correlation of EI and Leadership Style

		Servant	Laissez-faire	Transactional	Transformational
EI	Pearson correlation	-.391**	-.236*	-.366**	-.423**
	Sig. (2-tailed)	.000	.022	.000	.000
	n	94	94	94	94

**. Correlation was significant at the .01 level (2-tailed).

*. Correlation was significant at the .05 level (2-tailed).

Alternative Hypotheses 6a and 6b were as follows: DCM EI correlates positively with transformational and/or servant leadership styles. Based on the analyses, these two hypotheses were not supported for the positive correlation between DCM EI and transformational leadership style and servant leadership style. Although the correlation was significant, it was negative.

Alternative Hypotheses 6c and 6d were as follows: DCM EI correlates negatively with transactional and/or laissez-faire leadership styles. Based on the analyses, these two hypotheses were supported for the negative correlation between DCM EI and transactional leadership style and laissez-faire leadership style.

Summary and Transition

As a result of the quantitative analyses, the answers to the RQs were as follows:

For RQ1, 33.6% of the variation of the DV of team PE was accounted for by leadership style. Servant and transformational leadership styles were statistically significant and predictive of team PE. As servant leadership and transformational leadership increased, team PE increased. Therefore, as DCMs implement transformational leadership and servant leadership strategies, higher levels of team PE can be expected.

For RQ2, 25.0% of the variation in the DV of individual PE was due to leadership style. Among the four IVs, servant leadership emerged as a statistically significant predictor of individual PE. As servant leadership increased, individual PE increased. Therefore, as DCMs implement servant leadership strategies, higher levels of individual PE can be expected.

For RQ3, 27.1% of the variation in the DV of employee engagement was due to leadership style. Among the four IVs, servant leadership emerged as a statistically significant predictor of employee engagement. As servant leadership increased, employee engagement increased. Therefore, as DCMs implement servant leadership strategies, higher levels of employee engagement can be expected.

For RQ4, 3.5% of the variation in the DV of team PE was due to EI. The negative unstandardized coefficient of EI showed that as EI increased, team PE decreased. Therefore, as DCMs show higher levels of EI, lower levels of team PE were observed. DCM EI did not contribute significantly in predicting individual PE or employee engagement.

For RQ5, 33.6% of the variation in the DV of individual PE was due to the IV of team PE. Team PE emerged as a statistically significant predictor of individual PE. As team PE increased, individual PE increased. In addition, 34.1% of the variation in the DV of employee engagement was due team PE. Team PE emerged as a statistically significant predictor of employee engagement. As team PE increased, employee engagement increased. Therefore, as team PE increases among dental teams, higher levels of individual PE and employee engagement can be expected.

For RQ6, a Pearson correlation was conducted to determine whether EI correlated with leadership style. All leadership styles were slightly to moderately correlated with EI in a negative fashion. Therefore, as DCMs tend to have more EI, lower levels of all leadership styles are predicted.

In Chapter 5, I provide an interpretation of the findings, including a discussion of the RQs posed in the study. Limitations of the study are disclosed, and recommendations for further research are offered. Implications of the study and conclusions also are presented.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The intent of this study was to better understand whether leadership style and EI matter in the operation of dental practices and to explore the role of DCM in dentistry. The majority of dentists continue to function in the hybrid role of clinician and business manager. Although most dentists receive advanced clinical training, few receive adequate leadership or management training prior to entering the dental profession. Further complicating the matter, Fulop (2012) suggested that this hybrid management style might not be the most effective model for health care organizations.

To determine which leadership styles were the most effective and whether EI was influential in the dual role of DCM relevant to the study sample, I designed this study to examine the effects of DCM leadership style and EI on dental team outcomes, specifically team PE, individual PE, and employee engagement. To do so, dental teams of various sizes and composition were asked to complete assessments measuring these variables. Each DCM completed the MLQ and the SLS to determine transformation leadership, transactional leadership, laissez-faire leadership, and servant leadership styles. The MSCEIT also was completed and provided EI scores for the DCMs. All team members completed the GPES to determine team PE, the SPES to determine individual PE, and the UWES to determine employee engagement. The data collected from these assessments were analyzed quantitatively.

A discussion of the results is provided in this chapter, followed by an interpretation of the findings of each RQ, including the implications of those findings on

theoretical, methodological, and practical bases. Limitations of the study, along with recommendations and social change impact, are discussed.

Interpretations of Findings

Six RQs were formulated to determine the influence that leadership style and EI of DCMs had on their respective dental teams. These affects were examined not only on the individual level but also on the team level.

RQ1 asked whether DCM leadership style could predict team PE. Team PE has been shown to be a significant variable influencing workplace dynamics and team performance (Lee & Wei, 2011). Therefore, leadership styles that positively affect team PE are important to workplace outcomes. In this study, 33.6% of the variation of team PE was the result of leadership style. Specifically, servant leadership and transformational leadership were significant predictors of team PE, but the remaining leadership styles did not contribute significantly to team PE.

RQ2 asked whether DCM leadership style could predict individual PE. Individuals with high levels of PE believe that their work is meaningful and important to the organizations, they are able to perform the work or job tasks, they have some freedom or autonomy in carrying out given tasks or assignments, and their contributions make a difference in work outcomes (Tuuli & Rowlinson, 2009a). Analysis of individual PE and leadership styles suggested that leadership style was significant and accounted for 25.0% of the variance in individual PE. Specifically, servant leadership was a significant predictor of individual PE, but the remaining leadership styles did not contribute significantly to individual PE.

RQ3 asked whether DCM leadership style could predict employee engagement. Engaged employees display greater confidence (Rich et al., 2010); ability (Jeung, 2011); independence (Tuckey et al., 2012); creativity (Zhang & Bartol, 2010); and organizational commitment (de Villiers & Stander, 2011; Krishnan, 2003). Therefore, any leadership style that significantly predicts employee engagement is meaningful to organizations. Analysis of employee engagement and leadership styles suggested that leadership style was significant and accounted for 27.1% of the variance in employee engagement. Specifically, servant leadership was a significant predictor of employee engagement, but the remaining leadership styles did not contribute significantly to employee engagement.

RQ4 asked whether DCM EI could predict team PE, individual PE, and employee engagement. Some researchers have suggested that EI is imperative for effective leadership (George, 2000; Ingram & Cangemi, 2012; Palmer et al., 2001). However, the results of the current study showed that EI was not a significant predictor of individual PE or employee engagement. EI was a significant predictor of team PE at the $p < .05$ level, but it had a negative effect on team PE. In other words, as EI increased, team PE decreased.

RQ5 asked whether team PE could predict individual PE and/or employee engagement. Analysis of team PE with individual PE suggested that team PE was significant and accounted for 33.6% of the variance in individual PE. Analysis of team PE with employee engagement was significant and team PE accounted for 34.1% of the

variance in employee engagement. Therefore, team PE was a positive and significant predictor of individual PE and employee engagement.

RQ6 asked whether DC MEI correlated with leadership style. Specifically, it was hypothesized that DCM EI would correlate positively with transformational leadership and servant leadership and negatively with transactional leadership and laissez-faire leadership. The correlational analyses showed that the correlations were slight to moderate and that all correlations were negatively attributed. Therefore, DCM EI correlated negatively with all leadership styles.

Implications

The implications of this study are of theoretical and practical importance. Much theoretical research has been conducted to establish leadership theory, EI theory, PE theory, and engagement theory. This study contributes to each of these theoretical constructs as follows in the next section. In addition, practical applications are significant in that DCMs can receive applicable leadership knowledge and training that will have a positive impact on dental team outcomes.

Theoretical Implications

Leadership Theory

Effective leadership in organizations has been shown to improve PE and engagement among employees (Avolio et al., 2004; Babcock-Roberson & Strickland, 2010). This study focused on four styles of leadership: transformational, transactional, laissez-faire, and servant. Each style is discussed next from a theoretical standpoint in regard to the outcomes of this study. In a general sense, the results of the study made it

clear that leadership style had a significant and positive influence on key organizational outcome variables, such as team PE, individual PE, and employee engagement.

Transformational leadership. Transformational leadership theory has come to the forefront of leadership research (McCleskey, 2014). At a fundamental level, it has been defined as a style of leadership that "transforms followers to rise above self-interest by altering their morale, ideals, interests, and values, motivating them to perform better than initially expected" (Pieterse et al., 2009, p. 610). Typically, transformational leaders are charismatic leaders who focus on empowering (Avolio et al., 2004; de Villiers & Stander, 2011; Drew, 2010; Zhang & Bartol, 2010); inspiring (Martin, 2009; Ryan & Deci, 2000); encouraging participation (Huang et al., 2009); and developing growth in their employees. In this study, transformational leadership style was predictive of team PE. This finding is significant in that team PE also was a strong predictor of individual PE and employee engagement, each of which has been shown to produce positive organizational outcomes (Rich et al., 2010; Seibert et al., 2011). Therefore, because of the effects of team PE on individual PE and employee engagement, transformational leadership had an indirect link to these variables based on its significantly predictive and positive influence of team PE.

Transactional leadership. Transactional leadership is a leadership style that is managerial in nature and concentrates on supervision, organization, and group performance; it looks for day-to-day efficiencies in business practices. Through these exchanges, leaders strive to accomplish organizational performance objectives, maintain current organizational situations, direct behaviors toward the leaders' goals, and motivate

employees through contractual agreements (McCleskey, 2014). Results of this study suggested that the reward/punishment nature of transactional leadership was not conducive to the outcome variables. This leadership style was not predictive of team PE, individual PE, or employee engagement. Given that transactional leadership tends to be more managerial in nature and aims more at monitoring and controlling employees (Bono & Judge, 2004), findings suggest that the employees who participated in the study were less likely to feel empowered or engaged in their work when this style of leadership was used.

Laissez-faire leadership. Laissez-faire leadership is more indicative of leaders who avoid decisions and abdicate responsibilities (Judge & Piccolo, 2004). It is a style that is typically associated with or perceived as an ineffective and even detrimental form of leadership by followers (Bass, 1990). Results of this study supported this presumption in that laissez-faire leadership was not predictive of positive organizational outcomes such as team PE, individual PE, and employee engagement. Results also suggested that leaders who avoided leadership responsibility and/or were passive in their leadership style likely did not foster empowerment or engagement among their employees.

Servant leadership. From a theoretical standpoint, servant leadership theory is still developing (van Dierendonck, 2011). Its basis is in the desire of leaders to serve those whom they lead. Liden et al. (2008) identified nine dimensions that constitute servant leadership as a distinct construct: emotional healing, creation of value for the community, conceptual skills, empowerment, provision of assistance to help subordinates

to grow and succeed, ethical behavior, relationships, placement of subordinates first, and servanthood.

Based on the positive results derived from this study regarding servant leadership style, theoretical development of this construct would prove invaluable. Servant leadership was a significant predictor of all outcome variables. It was predictive of team PE, individual PE, and employee engagement. As such, servant leadership became a significant predictive variable in this study. Much like some constructs within the transformational leadership style, which also had significance in this study, the servant leadership style has a strong emphasis that focuses on the empowerment of employees and developing genuine relationships. From a theoretical standpoint, results suggested that leaders are much more likely to have empowered and engaged employees when they use an inclusive leadership style that puts employees first.

Emotional Intelligence Theory

The basis of EI theory reflects on the ability to manage emotions in self and others. Individuals with EI tend to have high levels of accountability for their own emotions and responsibility for all thoughts and behaviors related to those emotions (Singh, 2006). EI is the ability to use all emotion intelligently. Researchers often have commented that EI is a requisite of effective leadership (George, 2000; Ingram & Cangemi, 2012; Palmer et al., 2001). McCallin and Bamford (2007) claimed that health care professionals must be socially competent and able to engage in building teams that are collectively responsible and accountable for their actions.

EI theoretical evidence has linked EI to performance in the workplace (Neale et al., 2009). Neale et al. (2009) claimed that EI development in individuals, teams, and organizations can lead to more productive, successful, and sustainable business cultures. Singh (2006) also suggested that employees who learn and embrace the principles of EI are better team players; are more creative; are more productive; and are better able to overcome obstacles, setbacks, and conflicts within the workplace.

However, the results of my study did not support such claims and suggested, instead, that DCM EI is not predictive of team PE, individual PE, and employee engagement. I used only the total raw EI score in the MR and correlational analyses. Perhaps further examination of individual subset groups (i.e., perceiving, facilitating, understanding, and managing) would show meaningful predictive correlations with the research variables. A correlational analysis of leadership style and EI was moderately significant but negatively correlated.

Psychological Empowerment Theory

PE has been defined by the level of intrinsic motivation toward work in the cognitive areas of meaning, competence, self-determination, and impact (Zhu et al., 2012). PE has been strongly correlated with high performance, social support, job satisfaction, leadership, organizational commitment, organizational citizenship, and work characteristics (Huang et al., 2009; Seibert et al., 2011). Therefore, from a theoretical standpoint, PE on individual and team levels is a significant variable in positive organizational outcomes.

Results of this study suggested that significant predictive correlations existed between transformational leadership and team PE and servant leadership with team PE and individual PE. It is interesting to note that PE in general thrived in employees with leaders whose leadership styles focused on employee growth and support. Each of these leadership styles supported the main theoretical constructs of PE: meaning, competence, self-determination, and impact. Transformational leadership encouraged participation, and individual growth, and it was inspiring. This leadership style helped employees to develop higher levels of self-efficacy and competence, facilitated autonomy through delegation, and generated a feeling of meaningful impact in the workplace. Servant leadership style similarly affected the main constructs of PE through leadership that focused on the employees. As a leadership style, it prioritized employee growth, competence, and impact. It also provided a meaningful focus not only on job-related tasks but also on outside-of-work concerns, such as developing community, supporting emotional well-being, and providing service. Other leadership styles, such as transactional and laissez-faire leadership styles, both of which are more task oriented or avoidance oriented, were not predictive of PE in the workplace.

In addition, team PE significantly predicted individual PE and employee engagement. This significant finding suggests that in regard to this study, group dynamic theory was important in the workplace and contributed to organizational outcomes. Improving the group dynamic had a direct and predictive influence on improving individual dynamics in the organizations. Transformational leadership style and servant leadership style were both predictive of team PE and had direct or indirect influences on

individual PE and employee engagement. Finally, DCM EI did not have any predictive value regarding PE in this study.

Engagement Theory

Employee engagement has been described as a cognitive event or a state of mind in which employees experience their roles in the workplace. This state of mind leads to emotional state, which defines how employees feel about their work, which then leads to behaviors, and is characterized by vigor, dedication, and absorption (González-Romá et al., 2006). Positive consequences of engagement include higher levels of job involvement, enhanced job performance, job satisfaction, intrinsic motivation, improved organizational citizenship, and organizational commitment (Rich et al., 2010). Results of this study suggested that team PE and servant leadership style were significant predictors of employee engagement.

Servant leadership is conducive to the basic constructs of engagement theory: vigor, dedication, and absorption. Vigor, as described in engagement theory, suggests that employees have a heightened sense of enthusiasm about their work and the organization. Servant leaders encourage enthusiasm because the employee comes first in the organization. Employees feel valued, they feel supported, and they feel that their leaders genuinely care about them as individuals. It is reasonable to expect higher levels of dedication to the organizations as the result of this leadership style, along with the desire of employees to commit to doing their jobs to the best of their ability. Servant leadership is highly supportive of the antecedents of engagement described by Kahn (1990) as psychological meaningfulness, safety, and availability.

As found in this study, empowered teams tended to have an engaging effect on individual employees on the teams. Empowered teams felt that they made meaningful contributions to the organization, they were competent, they had autonomy to accomplish job tasks and goals, and they had a significant impact on organizational outcomes. Such a team dynamic necessarily rubs off on the individuals on the teams and creates the vigor, dedication, and absorption described in engagement theory.

Practical Implications

The study has practical implications. Given that this study focused exclusively on dental teams, practical implications for the dental industry are discussed. However, other health care industries might take value in the implications that the results have for clinician managers in general. First, it has been established that the hybrid form of clinician management is difficult at best (Fulop, 2012), so given that dentists, as found in this study, had little formal management or leadership training, it is imperative that DCMs receive the training and support needed to manage dental teams effectively.

Results also showed that DCMs who were successful as DCMs, as measured by outcomes in team PE, individual PE, and employee engagement, were engaging in specific leadership styles. The servant leadership style for all variables and the transformational leadership style for team PE were shown to be effective. At the very least, DCMs should receive basic training at the dental level of their education and subsequently participate in dental continuing education about the key constructs of these leadership styles.

Another practical implication of importance includes team dynamics. Mitchell, Parker, Giles, and Boyle (2014) asserted that health care teams are more complex than nonmedical teams. DCMs who focus on team dynamics will reap the benefits of the subsequent improved individual outcomes of PE and employee engagement, as well as other organizational citizenship behaviors (Choi, 2009). Team cohesiveness, training, social and cultural development, and team building efforts are opportunities that DCMs might want to take advantage of to increase team PE. Providing the teams with organizational data, patient reviews, and other information that reflects the importance and impact of the role of teams in the organizations will be helpful in building team PE. Setting goals together as teams, not necessarily goals dictated by the DCMs, and then achieving those goals is an important activity for DCMs to engage in to develop positive team dynamics (DeShon, Kozlowski, Schmidt, Milner, & Wiechmann, 2004). Results of this study indicated that transformational and servant leadership styles are well suited to develop team PE.

Limitations of the Study

One of the primary and significant limitations of the study was the sample size. An objective of the study was to observe statistical differences between each dental team as a distinct IV. However, to treat each team as an IV, many more teams would have had to participate in the study to create a sample size adequate to consider each team an IV. As such, the entire sample had to be analyzed together to avoid problems with multicollinearity and other statistical problems associated with inadequate sample size. Therefore, the desired methodology of using a hierarchical MR approach as well as

nesting the data in groups was abandoned. Given the nature of the sample size, the study was limited to an analysis at the individual level, not the team level. This also points to a limitation regarding the DCM EI analyses. In this study, only 16 DCMs took the MSCEIT. Not only is the sample size small but the range of scores were also limited and, thus, could have skewed the results relating to EI as a predictor of the DVs.

The study also focused on dental teams only, thus limiting the generalizability to other types of teams lead by physicians, physical therapists, chiropractors, etc. Participants were selected from one specific region in one specific state, which could have limited the generalizability of the results. The characteristics of the sample, and potential similarities shared by DCMs due to their background, education, and experience may limit generalizability.

Although the response rate was 56.7%, the non-responders, as a group, must be considered as a possible limitation to the study. For example, it is possible that the non-responders were more likely to be less engaged team members. If so, and had they responded to the surveys, it could have had an affect on the outcomes of the study. Additionally, if the respondents did not participate because of a poor relationship with their DCM or a fear of being singled out by the DCM or researcher, then results could have been different.

Recommendations

Replicating this study with different types of health care teams and a more diverse regional sample is recommended to improve the generalizability of the results and determine whether clinician management vary in complexity in different health care

professions. I would suggest that physician teams in hospital settings, clinic settings, and ER clinic settings; nursing teams; chiropractors; physical therapists; dentists and dental specialists, and other such health care teams be considered for future study. This will also improve the issues with sample size limitations. Increasing the sample size, and more specifically, the number of teams/clinician managers, will improve the data obtained from a multilevel, nesting, and between-groups analytic approach. It will also provide more reliable results regarding EI effects on outcome variables and leadership style correlations through increasing sample data and obtaining a potentially broader range of EI score results.

Based on the significant role that servant leadership style had on the dental teams in this study, further development and refinement of servant leadership theory is warranted. Other studies have identified significant correlations between servant leadership and positive organizational outcomes (Politis, 2013; Rivkin et al., 2014; van Dierendonck, 2011). Therefore, it would be beneficial to clarify and solidify servant leadership as a viable theoretical construct.

Implications for Positive Social Change

It is important to review the potential positive implications of social change that this study provides. One of the primary issues discussed in Chapter 1 was research establishing the stressful nature of dentistry on dental practitioners. Much of that stress is related to practice management and personnel issues (Chilcutt, 2009). It has also been established that DCMs are expected to serve in the dual role of clinician and manager, which might not be the most effective management style (Fulop, 2012). Combined with

the reality that most dentists do not have adequate management or leadership training, the findings will be of value to practicing dentists who might be struggling as DCMs.

Dentists who are failing in the dual role, meaning that their clinical duties or managerial duties or both duties are suffering, will learn important practical applications from this research. First, they will learn about effective leadership styles that are predictive of positive team and individual outcomes. Second, they will recognize that trying to assume the dual role of clinician and business manager might not be in their best interests. Finding and hiring qualified and competent business managers might be the best solution so that dentists can then focus on the clinical duties that they were trained to do.

DCMs who use the transformational or the servant leadership style in their dental practices will improve the work experience of their employees, who will feel more empowered and engaged in their work. As such, job satisfaction and other positive organization outcomes will become more evident (Politis, 2013; Rivkin et al., 2014; van Dierendonck, 2011). Other consequences of these leadership styles are the positive personal outcomes that result from delegation, empowerment, and the individual growth of team members. Team culture also will improve. Ultimately, engaged and empowered dental teams will provide more high-quality services to patients.

Conclusion

Leadership style matters in dental team dynamics. Transformational leadership was predictive of team PE, and servant leadership was predictive of team PE, individual PE, and employee engagement. DCM EI was not a significant predictor of any of the

DVs, except for team PE, which indicated a negative correlation. EI also was negatively correlated to each leadership style. In other words, where there was any statistical significance, EI had a negative effect on the other study variables. In addition, team PE was a significant predictor of individual PE and employee engagement.

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Appendix A: Dentist Demographic Questionnaire

Please answer the following questions.

1. Have you had any formal education since dental school? (Y/N)

   If so, what? _____

2. How long have you been in practice? _____

3. How did you begin dental practice?

   a. _____ your own practice.

   b. _____ as an associate dentist in solo practice

   c. _____ as an associate in group practice

   d. _____ as an associate in corporate dental practice

   e. _____other

4. Describe your current dental practice.

   a. _____have your own practice

   b. _____associate in a solo practice

   c. _____associate in a group practice

   d. _____associate in a corporate dental practice

   e. _____other

5. How many clinical team members do you manage?

6. How many business staff members do you manage?

7. Do you have an office manager? Describe his/her role in the practice.

8. Are there multiple dentists in your office? How many?

9. Do team members consider you to be the leader of the dental team?

Appendix B: Dental Team Demographic Questionnaire

Please answer the following questions.

1. How many years of education do you have? _____
2. List any degrees you have earned_____
3. How many years have you worked in a dental office? _____
4. How many years have you worked in the current dental office? _____
5. What best describes your current role in the practice?
    a. _____Hygienist
    b. _____Hygiene Assistant
    c. _____Office Manager
    d. _____Receptionist
    e. _____Financial Coordinator
    f. _____Other