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The Relationship Between Leadership Practices and Organizational Commitment of Telecommunicators

André Lanier
University of Arkansas, Fayetteville

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The Relationship Between Leadership Practices and Organizational Commitment
of Telecommunicators

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Education in Adult Lifelong Learning

by

André Lanier
The Citadel, The Military College of South Carolina
Bachelor of Science in Business Administration, 1996
University of Arkansas
Master of Science in Operations Management, 2002

July 2020
University of Arkansas

The dissertation is approved for recommendation to the Graduate Council.

_____
Kit Kacirek, Ed.D.
Dissertation Chair

_____
Michael T. Miller, Ed.D.
Committee Member

_____
John W. Murry, Jr., Ed.D.
Committee Member

Abstract

The performance of 9-1-1 telecommunicators can mean the difference between life and death for the person on the other end of a phone. Effective leadership is critical to the success of the public safety answer point (PSAP) and the organizational commitment of the 9-1-1 telecommunicator. Bass and Riggio's (2006) Full Range of Leadership Theory (FLRT) is the basis for the current study. The FRLT covers leadership styles from laissez-faire to transformational (Matikainen, 2019).

The purpose of conducting the study was to identify and describe the 9-1-1 telecommunicator's organizational commitment based on the PSAP leadership categories. The study made use of this non-experimental, quantitative, descriptive, correlational research to fulfill this purpose. Using an online survey, a total of 81 9-1-1 telecommunicators from northern Florida completed the survey instrument. Transformational, transactional, and laissez-faire leadership styles (*independent variable*) were measured using The Multifactor Leadership Questionnaire (MLQ 5X-Short). Organizational commitment (*dependent variable*) was measured using the Organizational Commitment Questionnaire (OCQ).

The results provide future researchers with replicable procedures with which to examine the FRLT. The data provided practitioners and PSAP administrators with actionable guidance on leadership behaviors that positively influence 9-1-1 telecommunicators' organizational commitment in their communities and the field of emergency medical dispatch. The results of the study have implications for social change by providing data for PSAP administrators to improve leadership training and future leadership selection criteria. Putting the results into practice from the study provides an increase of effective leaders who proactively align the agency's vision with societal expectations, thus improving the PSAP's public perceptions and ability to save lives while maintaining the proper workforce.

Dedication

This study is dedicated to the people who are on the front lines every day, keeping us safe. When someone calls 9-1-1, they are having their worst day. The 9-1-1 telecommunicators are required to have their best day. The 9-1-1 telecommunicators, the first, first responders, whose selfless dedication to the safety and security of the general public is often overlooked, but it is so appreciated. Keep up the great work.

Acknowledgments

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Chapter 1: Introduction to the Study

> People have so many misconceptions about leadership. When they hear that someone has an impressive title or an assigned leadership position, they assume that he/she is a leader. *Sometimes* that is true. But titles do not have much value when it comes to leading. True leadership cannot be awarded, appointed, or assigned. It comes only from influence, and that cannot be mandated. It must be earned. The only thing a title can buy is a little time – either to increase your level of influence with others or to erase it. (Maxwell, 2007, p. 23)

A. Introduction

The three-digit telephone number "9-1-1" has been designated as the "Universal Emergency Number" for citizens throughout the United States to request emergency assistance. The number is intended as a nationwide telephone number and gives the public fast and easy access to a Public Safety Answer Point (PSAP) (National Emergency Number Association (NENA), 2019).

A PSAP means a communications center equipped and staffed on a 24-hour basis to receive and process telephone calls for emergency assistance from an individual by dialing (Virginia State Law Portal, 2019).

Since the creation of 9-1-1, the names of the employees who work in PSAPs have gone through many iterations. In the past, they were called emergency medical dispatchers, dispatchers, and 9-1-1 operators. For the current study, the term telecommunicator or 9-1-1 telecommunicator (modern-day job titles) describes an employee whose primary role is to dispatch help to those who call 9-1-1.

Every day, over 650,000 individuals across the United States find themselves in need of emergency assistance from firefighters, emergency medical technicians, law enforcement, and other public safety providers. 9-1-1 telecommunicators in emergency communications centers (ECC's are also known as Public Safety Answer Points) play a critical role as the very first

responders who initiate the 9-1-1 systems. Every year in the United States, 9-1-1 is activated 240 million times across 5,806 primary and secondary PSAPs (Kashani, Sanko, & Eckstein, 2018). When someone calls 9-1-1, the 9-1-1 telecommunicators represent the first line of emergency communication to speak with victims or witnesses of crimes (Rasmussen, 2015).

9-1-1 telecommunicators are expected to maintain rapid, accurate, and effective responses at all times. A critical incident can be emotionally overwhelming for an affected 9-1-1 telecommunicator depending on the way the event plays out and the availability of resources to the 9-1-1 telecommunicator who responds to the incident and has to cope with the event (Sotebeer, 2012). Critical, life-saving information is gathered and delivered instantly, such as a person's name, an address, the need for medical attention, or verbal step-by-step medical instructions. On the Federal Communications Commission website, David Simpson (2016) wrote:

> These call takers and dispatchers provide the first critical contact for those in need of emergency services. In the midst of crises, they obtain vital information from callers to link them rapidly to police, firefighters, and emergency medical responders – and at times even dispense vital, life-saving information themselves. (¶ 1)

9-1-1 telecommunicators handle a wide variety of calls. A call may include a toddler drowning, automobile collisions, a home invasion, a missing child, suicide, confessions of crimes, the discovery of a deceased family member, and many additional stressful, dangerous, and potentially deadly situations. In 2013, the NENA Standard on 9-1-1 Acute/Traumatic and Chronic Stress Management Working Group reported that emergency 9-1-1 telecommunicators endure stress at levels higher than in most professions:

> These stressors lead to many issues including health risks, lower employee retention, increased liability related to impaired work performance, and declining morale and attitudes in the workplace. In combination, these potential impacts of

unaddressed 9-1-1 stress threaten the PSAP's fulfillment of its mission to provide optimal emergency response to the public. (p. 8)

9-1-1 telecommunicators have been answering 9-1-1 calls since 1968 when the first call was made in Haleyville, Alabama, according to the Association of Public Safety Communications Officials (APCO) (2011). Gardett et al. (2013) noted that the role of the typical 9-1-1 telecommunicator is multifaceted. They found at least six 'sub-roles' or functions that have been identified in a 9-1-1 telecommunicator's job. These include interrogator, radio dispatcher (output), triage professional, logistics coordinator, resource person, and pre-arrival aid instructor. The Bureau of Labor Statistics website (2019) defined a police/fire/emergency 9-1-1 telecommunicator as:

> One who handles calls that can operate the radio, telephone, and computer equipment at the emergency communications center while receiving reports from the public about disturbances, crimes, medical issues, fire and, police emergencies. The 9-1-1 telecommunicator relays that information to emergency personnel (fire, police, and rescue first responders) and may maintain contact with the caller until emergency personnel arrive on the scene. (¶ 2)

Since the inception of the 9-1-1 system, the job definition of a 9-1-1 telecommunicator has not changed. New technologies have improved the 9-1-1 system, but they have not lessened the nation's need for skilled 9-1-1 telecommunicators (Simpson, 2015). Even with evolving methods of 9-1-1 contact for assistance, such as sending a text message, the 9-1-1 telecommunicator's role will continue to focus on listening to the distress of others and sending the proper public safety response. The 9-1-1 telecommunicators' jobs increasingly encompass not only call-taking and dispatch but also the integration and analysis of multiple sources of information to determine the appropriate response to any given emergency (Simpson, 2015). The result is that 9-1-1 communicators are conducting more analysis, from more information sources, and producing better response results than ever before (Simpson, 2015).

B. Natural Events in Northern Florida

According to the FCC's 2014 Master Registry of Public Safety Access Points (PSAPs), the state of Florida currently has 226 Primary PSAPs and 34 Secondary PSAPs (9-1-1 Master PSAP Registry, 2014). There are unique events that occur in northern Florida which may not occur in other parts of the country. Northern Florida presents a unique opportunity for the study of 9-1-1 telecommunicators due to natural disasters and demographic profiles that affect this area. Many of these disasters or events affect the workload and in turn, the organizational commitment of the 9-1-1 telecommunicators. Northern Florida has seen natural disasters such as hurricanes, flooding, tornados, severe storms, and wildfires in the recent past. As these events happened, the 9-1-1 telecommunicators were busy answering the phones and trying to get help to those in need. Administrative leadership during these times of crisis has a profound effect on organizational commitment.

C. Background

The role of 9-1-1 telecommunicators is rapidly changing. The job of the 9-1-1 telecommunicator requires more skills today than at any other point in time. The speed of change with technology, increased reliance on knowledge workers, globalization, diversity, and social responsibility are only a few of the challenges that must be overcome for organizations to compete effectively in the 21st century (Holt & Marques, 2012). Organizations need leaders who have the skills, creativity, and courage to build or recreate organizations within the framework of these new challenges (Warrick, 2011).

9-1-1 is the most recognized number in the United States. Since 9-1-1's inception, an untold number of American lives have been saved and just as many perpetrators arrested. Having

quality 9-1-1 telecommunicators working in the PSAP can literally mean the difference between someone's life and death. Karin Lehnardt (2017) of FactRetriever.com states the following:

> An emergency is a life-threatening situation where every second counts, and includes emergencies such as a heart attack, uncontrolled asthma attack, childbirth in progress, any event involving large amounts of blood, uncontrolled fire, a life-threatening event such as a knife fight, an armed robbery in progress, or a serious car accident (not a fender bender). (¶ 3)

The first 9-1-1 call was a proof of concept (NENA, 2019). That phone call proved the concept of 9-1-1 as a life-saving number. Since then, communities slowly implemented 9-1-1 technologies, procedures, and best practices for collecting information from callers, dispatching public safety agencies and providing critical updates to responders (Athey & Stern, 2002; Ornato, 2013; Shah, Bishop, Lerner, Czapranski, & Davis, 2003). PSAP's operate within a dynamic external environment; each call is different and must be handled with attention to detail and with compassion.

This expectation can be very challenging to 9-1-1 telecommunicators regardless of the call (Behr, 2000). One call may be relatively benign, like a fire in an abandoned building, and the next may be emotionally charged, such as a report of witnessing the death of a loved one. As technological improvements continue to improve the public's access to 9-1-1 service, leadership needs to be surveyed to ensure it is keeping pace providing the 9-1-1 telecommunicators with the required tools to perform at their best.

9-1-1 Telecommunicators Characteristics

The job of the 9-1-1 telecommunicator is very complex; however, the requirements are pretty standard across communities (Appendix 1). The PSAP job requirements and the characteristics of the occupation are similar throughout the industry. The website of The Red River Regional Dispatch Center (2019) explains the job parameters as follows:

Being a telecommunicator can be a gratifying and fulfilling profession. It requires both physical skills and mental abilities. A telecommunicator must be able to make decisions and act on them with limited time and information in situations where there is an element of danger. He or she must be able to deal with people in a variety of emotional states while remaining calm and professional. Rigorous entry standards are necessary to ensure that dispatchers can meet the physical and mental demands of the job. (¶ 2)

Physical and Psychological Effects of Work

I handled the call just like I handle all of them. But when I finished, I went to the bathroom, vomited, and then I took the next call.

- Anonymous 9-1-1 Telecommunicator (2012)

Recent figures from the United States suggest that stress has caused as many as 1 million people to miss work every single day (Stahl, 2016), which costs organizations an estimated $125 billion to $190 billion a year in health-care spending, loss of productivity, and employee turnover (Garton, 2017). According to Boucsein (2012), stress "can be defined as a state of high general arousal and negatively tuned but unspecific emotion which appears as a consequence of stressors, (i.e., stress-inducing stimuli or situations) acting upon individuals." Stressors are the stimuli or conditions found in an environment that cause stress. Among others, stress is associated with nervousness, tension, strain, anxiety, exhaustion, depression, burnout, headaches, gastrointestinal disorders, hypertension, cold/flu episodes, sleep problems, cognitive ability, irritation, annoyance, anger, sadness, and grief (Stawski, Almeida, Lachman, Tun, & Rosnick, 2010).

9-1-1 telecommunicators are challenged by acute and chronic workplace stressors: tense interactions with citizen callers in crisis; overtime; shift-work; ever-changing technologies; and negative work culture, including co-worker conflict (Meischke et al., 2018). This workforce is also subject to routine exposures to secondary traumatization while handling calls involving

emergencies, and while making time urgent, high stake decisions over the phone (Meischke et al., 2018).

The adverse outcomes associated with exposure to acute and chronic occupational stressors are costly and include physical and mental diseases, and impaired work performance, which can threaten the attainment of an organization's critical mission(s) (O'Keefe, Brown, & Christian, 2014). Many 9-1-1 telecommunicators develop and utilize maladaptive coping skills to handle stress, resulting in reports of burnout (Getrich, White, Dale, & Olson, 2012).

Troxell (2008), one of the first to study 9-1-1 telecommunicators, reported high peritraumatic distress (i.e., responses occurring at the time of trauma and immediately after) and a positive relationship between peritraumatic distress and compassion fatigue in 9-1-1 telecommunicators. Pierce and Lilly (2012) added to these findings by assessing traumatic call exposure, peritraumatic distress, and post-traumatic stress disorder (PTSD) symptoms in 9-1-1 telecommunicators, reporting high levels of peritraumatic distress and a moderate, positive relationship between peritraumatic distress and PTSD symptom severity. Lilly & Allen (2015) found that 24.6% of 808 9-1-1 telecommunicators from throughout the United States acknowledged symptoms consistent with a diagnosis of PTSD.

Troxell's (2008) research suggests that direct, physical "incident scene" exposure(s) to traumata may not be necessary to cause or to increase the risk for PTSD in 9-1-1 telecommunicators. In addition to trauma exposures, 9-1-1 telecommunicators are subject to those stressors commonly encountered by non-emergency call center workforces, including fast-paced and time-urgent decision-making; tense interactions with distressed and sometimes abusive callers; time pressure to meet call processing requirements; and a negative work culture,

which can include co-worker conflict, and a lack of appreciation or recognition from supervisors (Wiegand, 2013).

Almost 43% exhibit high levels of burnout across all measures and these rates are high relative to those found among other frontline occupations, including nurses (Greenglass, Burke, & Fiksenbaum, 2001; Poncet et al., 2007), physicians ((Embriaco, Papazian, Kentish-Barnes, et al., 2007), and teachers (Hakanen, Bakker, & Schaufeli, 2006).

The population studied, 9-1-1 telecommunicators, have inherently stressful jobs. These workers answer approximately 2,400 calls a year (NENA, 2019; BLS, 2019), and often have to make life-or-death decisions in minutes, while also managing the emotions of call-makers and communicating quickly and accurately with officers they dispatch. Call dispatchers have been dubbed the "forgotten victim" when it comes to stress in policing (Sewell & Crew, 1984) because although they face much of the same trauma as emergency responders or law enforcement officers, they are considered clerical workers, and so do not get as much formal support, benefits or recognition for their work. Recent studies report high levels of alcohol abuse, PTSD, and depression among this population (Lilly, London, & Mercer, 2016). In qualitative interviews, 9-1-1 dispatchers and their supervisors noted that burnout was commonly discussed as "part of the job," but was also a common reason why people leave the job.

Currently, there is a nationwide shortage of 9-1-1 telecommunicators. This shortage results in a lower level of service to the public and higher tax dollars spent on staff time to recruit, test, hire, and train new 9-1-1 telecommunicators. Overtime money is used to cover staffing shortages. In 2009, the Association of Public-Safety Communications Officials (APCO) completed a study called Project RETAINS (Responsive Efforts to Assure Integral Needs in Staffing) found that the national turnover rate in PSAPs is 19%, which is higher than the

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turnover rate for nurses and teachers. This study also found that centers that had employees who were more satisfied with their supervisors and managers had higher retention rates.

Leadership must realize the lives of others depend on the ability of 9-1-1 telecommunicators to work effectively and efficiently, and there is a significant need for stress-reduction within this population (Kerr, Ornelas, Lilly, et al., 2019). Ty Wooten states, "Remember, people, call 9-1-1 on the worst days of their lives. And it is one day after another for the operators, and that is when we start to see an accumulation of stress" (MacLellan, 2015, para. 12).

Organizational commitment has become a favorite subject for study by researchers since it can lead to performance improvement, reduction of displacement, reduction of employee absenteeism, and organizational effectiveness (Neininger, Lehmann, Willenbrock, et al., 2010). As a result, organizational commitment is considered a critical variable in organizational productivity. In this regard, classifying the organizational behaviors and its causes in the context of the organization cause an advancement in organizational effectiveness (Benligiray & Sönmez, 2012).

A lack of understanding exists as to the effects of the PSAP administrator's leadership as it relates to the continuous flow of traumatic calls that are influencing 9-1-1 telecommunicators' organizational commitment. Many studies conducted over the years provide understanding for the leadership requirements of those first responders on the scene. Research on first-responders predominantly targets police or law enforcement officers (Arble & Arnetz, 2018), firefighters (Harvey et al., 2016), search and rescue personnel such as the National Guard (Sahker, Acion, & Arndt, 2016), ambulance personnel (emergency medical technicians and paramedics; (Streb, Häller, & Michael, 2014), and military personnel (Jacobson, Donoho, Crum, et al., 2015).

D. Problem Statement

While there is abundant literature regarding the impact of leadership on employee

organizational commitment, few studies have examined leadership in the context of 9-1-1

telecommunicators. In a 2018 study of 209 9-1-1 telecommunicators, Boland et al., found 9-1-1

telecommunicators exhibited a level of professional burnout commensurate with that of

physicians and significantly higher than that experienced by paramedics and emergency medical

technicians. Several factors lead to this, which include limited opportunities, internal and

external stressors such as in-house politics, the threat of danger, traumatic work experiences and

community relations, as well as personal matters such as boredom and marital issues (Walker &

Katz, 2013). Lasiewicki (2007, p. 10) wrote, "A loss of employees' satisfaction frequently leads

to organizational pathologies that include compensatory losses in productivity, aberrant or

deviant behavior, and turnover."

Therefore there is a need to understand what leadership practices are most effective in

supporting employee organizational commitment among 9-1-1 telecommunicators that have

unique job stressors compared to the typical employee. Decker (2018) wrote:

> One of the key issues affecting these variables is the leadership capabilities
> displayed by the chief executive (Administrator) and his/her ability to lead and
> develop personnel, allocate resources, and improve overall working conditions.
> (p. 10)

Decker went on to argue "a strong leader and support system at the top of the hierarchical

organizational table could reduce some of these factors and provide a better ratio of job

satisfaction and commitment to the organization" (p. 11).

Following the Full Range of Leadership Theory, Bass and Riggio (2006) posit that a

combination of transactional and transformational leadership behaviors result in heightened

motivation to designated outcomes (extra effort) on the part of subordinates, leading to

performance beyond expectations. Mainly, transactional practices provide the foundation on which transformational behaviors can be added to bring about exceptional performance (Kieres, 2012). Transformational leadership helps followers grow and develop into leaders by responding to individual followers' needs, empowering them, and aligning the objectives and goals of the individual followers, the leader, the group, and the broader organization (Bass & Riggio, 2006). Transactional leadership emphasizes the transaction or exchange that takes place among leaders, colleagues, and followers that discusses the exchange that is required and specifies the conditions and rewards received by others for fulfilling those requirements (Bass & Riggio, 2006).

Transformational, transactional, and laissez-faire leadership theories have been researched in several various organizational settings (Bass, 1985). The Multifactor Leadership Questionnaire (MLQ) was developed with the specific purpose of measuring effective leadership in military, government, educational, religious, service, and volunteer organizations (Bass & Avolio, 2000). Several studies within law enforcement have been conducted utilizing the Multifactor Leadership Questionnaire (5X-Short) survey, as it has been deemed a valid and reliable measurement tool (see Table 10, p.75).

E. Purpose of the Study

The purpose of conducting the study was to identify and describe the 9-1-1 telecommunicator's organizational commitment based on the PSAP administrator's leadership categories. The research results intended to provide limited empirical support for Bass and Riggio's (2006) Full Range of Leadership Theory in the field of emergency medical dispatch.

F. Research Questions

1. What is the personal and professional profile of individuals serving as 9-1-1 telecommunicators in northern Florida?

2. What are the perceptions of 9-1-1 telecommunicators' of their direct supervisors' leadership practices?

3. What is the organizational commitment perception of 9-1-1 telecommunicators in northern Florida?

4. To what extent is there a correlation between a 9-1-1 telecommunicator's organizational commitment and their perceptions of their direct supervisors' leadership practice?

5. What are the professional development training needs of 9-1-1 telecommunicators in northern Florida?

G. Theoretical Foundation

According to the integrative framework of organizational support theory (OST) (Eisenberger & Stinglhamber, 2011), employees develop perceptions regarding the extent to which the organization they work for values their contributions and cares for their general well-being. They go on to say these perceptions are known as perceived organizational support (POS). POS activities & programs are commonplace today. To understand why POS programs produce favorable outcomes, it is necessary to understand the theoretical underpinnings of POS. Eisenberger and Stinglhamber (2011) wrote:

> POS triggers social exchange processes within the organizations. That is, when employees perceive that they are treated favorably, they exhibit favorable attitudes and behaviors and start contributing more enthusiastically toward the attainment of organizational goals and objectives. In addition to social exchange processes, POS also fulfills specific socio-emotional needs of employees, which results in increased organizational identification, commitment, and well-being (p. 501).

Organizational support theory has drawn considerable attention from researchers and practitioners across the globe as it offers a sound 'viewpoint' of examining and predicting the 'employee-organization' relationships (Eisenberger & Stinglhamber, 2011). Building upon OST,

Rhoades & Eisenberger (2002) conducted a meta-analytic review to ascertain the antecedents and outcomes of POS. They found POS correlates with several antecedents (supervisory support, HR practices & fairness) and attitudinal outcomes (organizational commitment, job satisfaction, and job performance). Riggle, Edmonson & Hansen (2009) confirmed these findings. They found POS positively correlated with organizational commitment, job satisfaction, and job performance, and negatively related to intentions to leave.

H. Definitions

Affective Commitment (AC): An employee's emotional attachment, involvement, or identification with a particular organization (Meyer & Allen, 1997).

Contingent Reward: Emphasizing the giving of rewards contingent upon the agreed performance standards through the clarification of goals, work standards, assignments, and equipment between the leader and the follower (Bass, 1985).

Continuance Commitment: An employee's awareness of the costs associated with leaving an organization (Meyer & Allen, 1997).

Extra Effort: Based on the willingness of any subordinate to produce effort beyond expectation as a result of the behavior of leaders (Bass, 1985).

Job Satisfaction: The extent to which a person's hopes, desires, and expectations about the employment are fulfilled (Collins English Dictionary, 2012).

Laissez-Faire Leadership (Theoretical): According to Bass and Avolio (2004), Laissez-faire leadership is essentially no-leadership or the behavior of leaders who avoid making decisions and provide follower feedback only when problems need to be corrected.

Leader: A leader "is one who commits people to action, who converts followers to leaders, and who may convert leaders into agents of change" (Bennis & Nanus, 1985, p. 3).

Leadership: The art of influencing others to their maximum performance to accomplish any task, objective, or project (Cohen, 1990).

Leadership Styles: The manner and approach of providing direction, implementing plans, and motivating people (Clark, 2004). As seen by the employees, it includes the total pattern of explicit and implicit actions performed by their leader (Newstrom & Davis, 1993).

Management-by-exception (active): Emphasizes the active practice by the leader of attending to mistakes and deviations and the taking of corrective actions if the standards are not met (Hater & Bass, 1988).

Management-by-exception (passive): Emphasizes the less active, or passive, practice of avoiding corrective action as long as the standards are met (Bass, 1985).

Normative Commitment: An employee's sense of obligation to an employer or organization (Meyer & Allen, 1997).

Operating procedures: Written procedure prescribed for repetitive use as a practice in accordance with agreed-upon specifications aimed at obtaining the desired outcome (Business Directory, n.d.).

Organizational Commitment: Viewed as an organizational member's psychological attachment to the organization. Organizational commitment plays a very large role in determining whether a member will stay with the organization and zealously work towards organizational goals (Study, n.d.).

PSAP: A public safety answering point (PSAP) is a call center responsible for answering calls to an emergency telephone number for police, firefighting, and ambulance services. A PSAP facility runs 24 hours a day, dispatching emergency services or passing 9-1-1 calls on to

public or private safety agencies. Trained operators are responsible for dispatching emergency services (Techopedia, n.d.).

PSAP Telecommunicator: As used in 9-1-1, a person who is trained and employed in public safety telecommunications. The term applies to call takers, dispatchers, radio operators, data terminal operators, or any combination of such functions in a PSAP (NENA, 2019).

PSAP Communications Manager/Director: An individual who performs responsible administrative and managerial work overseeing the daily operational needs of the Public Safety Communications Center; assists in the management and support of the Public Safety Center; supervises lower-level supervisors, determines proper staffing levels, coordinates with various user agencies, and develops and implements operating procedures; supervises through subordinate supervisors; supervises personnel engaged in answering and responding to phone and radio dispatch of Fire and Emergency Management Services Response (EMS) (Pinellas County, 2019).

Transformational Leadership: A style of leadership developed by Burns (1978) and expanded upon by Bass in which individuals stimulate and inspire followers to achieve extraordinary outcomes and, in the process, develop their leadership capacity by responding to individual followers' needs by empowering them and aligning objectives and goals to benefit all stakeholders and the broader organization. Bass and Avolio (1994) developed the four "I's" to expand upon Burns' original theory of "transforming," which consists of the following:

Idealized Influence (II-A; attributed) Builds trust by inspiring power and pride in followers by going beyond individual interests and focusing on the interests of the group and its members.

Idealized Influence (II-B; behavioral) Acting with integrity, leaders talk about their most

important values and beliefs, the moral and ethical consequences of their actions, and focus on a desirable vision of the organization.

Inspirational Motivation (IM) Leaders articulate shared goals and mutual understanding while providing a vision to obtain goals and expectations.

Intellectual Stimulation (IS) Leaders assist and encourage others to engage in innovative thinking and look to solve problems beyond the "outdated" way of thinking about current problems.

Individualized Consideration (IC) Involves understanding and sharing in others' concerns and developmental needs and treating each individual uniquely to maximize and develop his/her full potential.

    Transactional Leadership: A style of leadership developed by Burns (1978) and expanded upon by Bass, which motivates followers by appealing to their self-interest and exchanging benefits (Kellish, 2014). Transactional leadership involves three uniquely distinct behaviors: management-by-exception (active), management-by-exception (passive), and contingent reward (Matikainen, 2019). Transactional leadership does involve values but are values relevant to the exchange process, such as honesty, fairness, responsibility, and reciprocity (Yukl, 2013).

I. Limitations

    Study accepted the following limitations:

1. The Multifactor Leadership Questionnaire was a self-report instrument. With a self-reporting questionnaire, some responses may be driven by a desire to be socially accepted.

2. The findings of the study may not be generalized to the population as a whole. The study was limited to 9-1-1 telecommunicators in northern Florida, and this unique environment precludes generalizations to other geographic areas.

3. The choice of the Multifactor Leadership Questionnaire (MLQ), which measures leadership styles and the Organizational Commitment Questionnaire (OCQ), which measures organizational commitment, excluded other instruments and their underlying assumptions about commitment and leadership.

4. Multifactor Leadership Questionnaire – The Multifactor Leadership Questionnaire (MLQ - also known as MLQ (5X-Short) or the standard MLQ) measures a broad range of leadership types from passive leaders to leaders who give contingent rewards to followers to leaders who transform their followers into becoming leaders themselves. The MLQ identifies the characteristics of a transformational leader and helps individuals identify how they compare their self-perception and the perceptions of those whom they supervise.

5. Organizational Commitment Questionnaire – The measurement used to test organizational commitment is the OCQ (Mowday, Steers, & Porter, 1979). Based on a series of studies among 2,563 employees in 9 different organizations, satisfactory test-retest reliabilities and internal consistency reliabilities were identified. Also, cross-validated evidence of acceptable levels of predictive, convergent, and discriminant validity emerged for the instrument.

J. Significance

The study provided knowledge for a more appropriate fit between an individual's leadership style and the effectiveness of an organization (Bennet, 2009); increasing the ability of the organization to overcome new challenges to compete effectively in the 21st century (Holt, & Marques, 2012). Lasiewicki (2007) wrote:

> Endowing these administrators with the knowledge that defines an individuals commitment to their job and describes the processes by which telecommunicators' motivations overpower their commitments to their organizations provides PSAP administrators with intervention tools that may prevent telecommunicators from departing from organizational values to fall into

the slippery slope of deviant behavior that undermines the organization's mission and reduces the public trust of telecommunicators in general (p. 9).

When turnover or burnout occurs in a PSAP, the majority of incoming personnel have been young individuals, often considered 'Millennials' in the early stages of their work life. Imposing corrective action on a Millennial employee may be difficult for several reasons, including that they often challenge authority instead of deferring to it (Wood, 2019). The erosion of traditional behavioral boundaries and protocols find their way in the middle of the employer-employee relationship. In managing this relationship, many are curious to understand the behaviors of these younger workers (Wood, 2019). The current study sought to identify how the full range of leadership styles displayed by PSAP administrators impact the 9-1-1 telecommunicators' organizational commitment.

K. Conceptual Framework

The conceptual framework of this study was Bass and Avolio's (1994), the Full Range of Leadership Theory, also known as the Transformational-Transactional Leadership Model, which consists of 9 factors. Five are transformational behaviors: idealized influence (attributed), idealized influenced (behavior), inspirational motivation, intellectual stimulation, and individualized consideration. Two are transactional behaviors: contingent reward and management-by-exception (active). Two are passive/avoidant behaviors: management-by-exception (passive) and laissez-faire.

The independent variable of *leadership,* in general, has been defined as the art of motivating a group of people to act towards achieving a common goal (Ward, 2019). The dependent variable of organizational commitment is defined as an individual's psychological attachment to the organization (affective, normative, continuance commitment) (Mindtools, 2020)

L. Defining Leadership

The history of leadership dates as far back as biblical and ancient times (Landis, Hill, & Harvey, 2014). Since the beginning of written language, leadership has been studied and evaluated. Leadership is one of the most researched topics and the least understood but is essential to all organizations (Landis et al., 2014). Leadership is a key ingredient in any organizational working environment (Benson, 2015) and consists of an organized hierarchy among humans and animals, comprised of leaders empowered by the challenges that come with being a leader (Makaroff, Storch, Pauly, et al., 2014).

Despite the issue of leadership having held humankind's attention for thousands of years (Blunt, & Jones, 1997; Fry, Vitucci & Cedillo, 2005; Hassan, Asad, & Hoshino, 2016; Higgs, 2003; Vie & Vie, 2011), a measure of uncertainty still exists as to what it is (Bolden, 2004; Iszatt-White, Graham, Kelly, et al., 2011). The words "leadership," "leader," and "follower" appeared in ancient Egyptian writing as early as 2300 B.C.E. (Bass, & Bass, 2008), see Figure 1. Writings on these concepts and principles have continued across the Millennia through various works by authors such as Confucius, Homer, Plato, Aristotle, Machiavelli, and Shakespeare (Bass & Bass, 2008). Books on leadership continue to be written. In 2018, 1,246 paperback books were published with the word "leadership" in the title (Cairnway, 2018).

Figure 1. Egyptian Hieroglyphs for Leadership, Leader, and Follower. Adapted from "The Bass Handbook of Leadership: Theory, Research, and Managerial Applications, 4th ed.," by B. M. Bass & R. Bass, 2008, p. 5. Copyright 2008 by Free Press.

The lack of a common leadership definition is especially perturbing because leadership is accepted as central to the success of "organizations" (Hanges, Aiken, Park, et al., 2016; Landis, Hill & Harvey, 2014). The lack of certainty is compounded by phenomena such as "globalisation" that are increasingly exposing leaders to new challenges (Ababneh, 2016; Jogulu, 2010), not the least of which is leading in a multicultural environment (Parham, Lewis, Fretwell, et al., 2015). Table 1 shows just a few definitions of leadership that are found in the literature.

Table 1.
Definitions of Leadership

Cited in	Leadership is
Hemphill & Coons (1957, p. 7)	"the behavior of an individual…directing the activities of a group toward a shared goal."
Katz & Kahn (1978, p. 528)	"the influential increment over and above mechanical compliance with the routine directives of the organization."
Rauch & Behling (1984, p. 46)	"the process of influencing the activities of an organized group toward goal achievement."
Richards & Engle (1986, p. 206)	"about articulating visions, embodying values, and creating the environment within which things can be accomplished."
Jacobs & Jaques (1990, p. 281)	"a process of giving purpose (meaningful direction) to a collective effort, and causing willing effort to be expended to achieve purpose."
Schein (1992, p. 2)	"the ability to step outside the culture…to start evolutionary change processes that are more adaptive."
Drath & Palus (1994, p. 4)	"the process of making sense of what people are doing together so that people will understand and be committed."
House et al. (1999, p. 184)	"the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and the success of the organization…"

Note. Adapted from "Introduction: The Nature of Leadership," by G. A. Yukl, 2013, Leadership in Organizations, 8th ed., p. 3. Copyright 2013 by Pearson Education, Inc., publishing as Prentice Hall

Leadership is a crucial ingredient in any organizational working environment (Benson,

2015) and consists of an organized hierarchy among humans and animals, comprised of leaders

empowered by the challenges that come with being a leader (Makaroff, Storch, Pauly, et al.,

2014). Current and previous researchers have continuously applied leadership categories, such as styles, traits, and behaviors, to their research to understand the causes and effects of the categories (Bogenschneider, 2016). As stated by Bass and Bass (2008), one researcher found 221 scholarly definitions for the term leadership (Rost, 1993). Conversely, "The definitions most commonly used tend to concentrate on the leader as a person, on the behavior of the leader, on the effects of the leader, and on the interaction process between the leader and the led" (Bass, & Bass, 2008, p. 15). Another way to define leadership:

> Leadership is an interaction between two or more members of a group that often involves a structuring or restructuring of the situation and perceptions and expectations of the members. Leaders are agents of change—persons whose acts affect other people more than other people's acts affect them. Leadership occurs when one group member modifies the motivation or competencies of others in the group. (Bass, 1990, pp. 19-20)

For transformational theorists, leadership can come from just about anywhere (Bass, 1985; Kouzes & Posner, 1987). Kouzes and Posner (2011) explained, "Leadership is a relationship between those who aspire to lead and those who choose to follow" (p. 2). Kouzes and Posner (2013a) described leaders as "ordinary people" (p. 239). In their research, Kouzes and Posner (2013a) found that "…leadership is not something that happens only at the top of organizations or that is confined to formal organizations at all. It is experienced everywhere" (p. 331).

M. Chapter Summary

In this chapter, the focus of the study was outlined, including the need to examine the profession of 9-1-1 telecommunicators. The background of the 9-1-1 profession was explained, including the physical and psychological effects of being a 9-1-1 telecommunicator. These individuals are in high-stress positions, their ability to be effective, along with their mental

health, and their organizational commitment is directly linked to the leadership practice of their PSAP administrators.

The purpose of conducting the study was to identify and describe the 9-1-1 telecommunicator's organizational commitment based on the PSAP leadership categories. Chapter 1 introduced the Full Range of Leadership Theory (FRLT) framework for this study. This theory is constructed of three distinct leadership styles (transformational, transactional, and laissez-faire). The FRLT was discussed with how this theory relates to the organizational commitment of 9-1-1 telecommunicators in a PSAP. The chapter set out the research background and illustrated the statement of the research questions. The theoretical foundation for the study of Organizational Support Theory (OST) was discussed. Definitions were included to understand better the terminology used in this study. The chapter also described the significance and rationale for conducting the study as well as limitations. Finally, the history of defining leadership was discussed. Chapter 2 will explore the literature review for this study.

Chapter 2. Literature Review

A. Introduction

Traditionally, PSAPs have been run as paramilitary organizations, mirroring the police

agencies they support. Using this model, strict adherence to policy and procedure, getting things

done the right way, and following directions are prioritized above all else (Timm, 2016). The

structure has always been very hierarchical:

> It is easy to see why this approach is taken. Police work is a serious business.
> There are lives on the line, and because of liability, things must be done a certain
> way. Something is lost, however, when supervision focuses only on the task,
> neglecting the person doing the work. (Timm, ¶ 13)

Successful businesses continue to survive on profitability and customer satisfaction. They

accomplish their missions by trimming company "fat" and workplace inefficiencies to maximize

the work effort of personnel while reducing employee stress (Cruickshank, 2013). These

business models also can be applied to policing. They serve as natural starting points toward

balancing the scale as leadership models and practices do not need to be drastically changed

from the paramilitary model to the business model (Cruickshank, 2013). To accomplish this,

policing agencies could remove organizational roadblocks by using simple business techniques.

Currently, law enforcement typically only works on trimming the fat when faced with a budget

crisis, and, even then, it usually involves layoffs, rather than restructuring, increased efficiency,

and overall improvement (Cruickshank, 2013).

Many theories put forth were developed due to the requirements of change in leading

organizations and their employees. The speed of change with technology, increased reliance on

knowledge workers, globalization, diversity, and social responsibility are only a few of the

challenges that must be overcome for organizations to compete effectively in the 21st century

(Holt, & Marques, 2012; Dess, & Picken, 2000). Organizations must be able to change quickly

and be flexible to react to their environments (Bennett, 2009). Organizations need leaders that have the skills, creativity, and courage to build or recreate organizations within the framework of these new challenges (Warrick, 2011).

Leadership has been positively linked to employee organizational commitment through numerous studies by theorists and researchers over the past century. The majority of these studies have been focused on the private sector, with very little interest in the public sector, particularly in the field of 9-1-1 telecommunicators. This section of the study contains an expanded discussion on topics covered in Chapter 1. Included is a brief history of the 9-1-1 system, literature search strategy, the conceptualization of the study. This section also includes an in-depth description of the theories studied.

In the United States, the first catalyst for a nationwide emergency telephone number was in 1957, when the National Association of Fire Chiefs recommended the use of a single number for reporting fires (National Emergency Number Association (NENA), 2019, Tanny, 2017). The call for a national number continued to be discussed until 1967.

The President's Commission on Law Enforcement and Administration of Justice recommended that a "single number should be established" nationwide for reporting emergencies. The use of different telephone numbers for each type of emergency was determined to be contrary to the purpose of a single, universal number. (NENA, 2019, Tanny, 2017). On February 16, 1968, Senator Rankin Fite completed the first 9-1-1 call made in the United States in Haleyville, Alabama (NENA, 2019). In March 1973, the White House's Office of Telecommunications issued a public policy statement that recognized the benefits of 9-1-1, encouraged the nationwide adoption of 9-1-1, and provided for the establishment of a Federal Information Center to assist units of government in planning and implementation (NENA, 2019).

Since 1973, public safety answer points (PSAPs) have grown in capacity and technology. Just like most organizations today, the PSAP must look to the horizon for changes happening with technology and people. Many of today's call-taking systems are computer-driven with interactive maps and global positioning systems (South Texas Emergency Care Foundation (STEC), 2018). Advances in medical procedures and technology have steadily improved with each passing year. These advances have allowed faster medical attention through the protocols used in PSAP's. Protocols are tools used by 9-1-1 telecommunicators that guide callers through a sequence of questions to quickly obtain information necessary for dispatching the right responders to the right location (Pinellas County, Florida, 2019). Gardett et al. (2013) wrote:

> Thirty years ago, medical dispatching was considered the "weak link" in the chain of prehospital care. Emergency Medical dispatchers (EMDs, currently known as 9-1-1 telecommunicators) were largely untrained laypeople who simply collected an address, phone number, and complaint information and sent an ambulance to every call. This is no longer the case. The use of scripted, medically-approved protocols is now the standard of practice for certified EMDs, who use such protocols to accurately and efficiently prioritize and triage calls by categorizing patients into high, moderate, low, and nonemergency acuity levels. (p. 31)

B. Inspiration of Study

The inspiration for this study is from Vermeeren et al. (2014), who conducted a study on leadership styles, job satisfaction, and organizational performance in public sector organizations in Holland. The researchers performed a drawing on a secondary analysis of data from a national survey incorporating the views of 6,253 employees of Dutch municipalities using structural equation modeling.

Vermeeren et al. (2014) adopted and applied Delaney and Huselid's (1996) conceptualization of organizational performance to the Vermeeren et al. (2014) study; the conceptualization of firm performance was based on the employee's perspective of their firm's performance. Vermeeren et al. (2014) "examined the relationship between Job Satisfaction (a

mediating variable), two types of leadership styles, and Organizational Performance (the dependent variable) in government agencies in Holland." The Vemeeren et al., (2014) study found:

> The two types of leadership styles the researchers investigated were described as *Correcting* and *Stimulating,* the independent variables. A correcting leadership style corresponds to a transactional style of leadership, while a stimulating leadership style corresponds to a transformational style of leadership. (p. 179)

The results of the research study indicated that (a) Job satisfaction acted as a mediating variable between *Correcting* (i.e., Transactional) and *Stimulating* (i.e., Transformational) Leadership Style and Organizational Performance, (b) a transformational leadership style had a positive effect on ten different types of human resource practices, and (c) a transactional leadership style had no positive effect on the ten types of human resource practices that were enforced. The researchers indicated that the literature supported their findings of a difference in employees' perceptions of job satisfaction between government agencies and private sector organizations (DeSantis & Durst, 1996). The risk of a standard method bias can be prevented by designing multi-trait and multiple method studies in which the same subjects are measured on many constructs with different instruments. Vermeeren et al. (2014) identified an additional limitation in their study: *self-rating.* Self-reported data can introduce bias that can distort a research study; in the Vermeeren et al. (2014) study, employees were asked to rate their perceptions. The literature has shown that when self-rating, individuals tend to self-favor in their responses (Deleersnyder, Dekimpe, Steenkamp, et al., 2009).

Recommendations in the Vermeeren Research Study

Vermeeren et al. (2014) recommended that further studies on the phenomena should be based (a) in other national contexts, (b) with different types of public sector companies, and (c) with the application of different statistical methods. Based on the recommendations of

Vermeeren et al. (2014), the problem this study addressed is the gap in how *transformational*, *transactional,* and *laissez-faire leadership* styles (the independent variables) interacted with employee *organizational commitment* (the dependent variable) in PSAPs. This research study's target population was adult female and male full-time and part-time 9-1-1 telecommunicators in northern Florida; additionally, different statistical methods from those used in the Vermeeren et al. (2014) study were applied to the present study.

C. Florida Demographics

Northern Florida 9-1-1 telecommunicators were chosen as a governmental agency for a variety of reasons for study. There are differences within northern Florida that make it unique from the rest of the state of Florida for 9-1-1 telecommunicators. Florida's nickname is "The Sunshine State," adopted officially by the Florida legislature in 1970 (State Symbols USA, n.d.). Tourism is not a significant draw for northern Florida except for the city of St. Augustine, which is #5 on USA Today's Florida top 5 list (USAToday, 2020).

Table 2.

Demographic Statistics for Northern Florida and Florida

	Northern Florida	Florida	Country
Age	43.3	42	37.8
Gender – Male	49.65%	48.89%	49.2%
Gender – Female	50.35%	51.11%	50.8%
Household Salary	$58,188	$50,833	$57,652
Population Growth	+14.82%	+1.74%	+1.01
Education – 18 years and older			
Less than High School	9.36%	12.4%	12.6%
High School Diploma	30.1%	29.0%	27.3%
Some College	22.24%	20.4%	20.8%
Associates Degree	9.67%	9.8%	8.3%
Bachelor's Degree	17.96%	18.2%	19.1%
Graduate Degree	10.69%	10.3%	11.8%
Poverty Rate	15.39%	15.5%	14.6%

Data Retrieved from the United States Census Bureau (Latest Figures – 2017).

The two areas of concern that may affect the daily lives of northern Florida 9-1-1 telecommunicators are the population growth and the poverty rate. Anderson and Theodori (2009) interviewed political leaders and stakeholders in Texas counties experiencing a resource boom, and they reported the following adverse effects: increased truck traffic and accidents; gas leaks and explosions; contamination of groundwater; air pollution; decreasing freshwater

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supplies; and damage to local roads (pp. 121–124). For a family of four in the United States, the

poverty threshold hovers around $24,000. Additional household members add $5,000 to the

poverty threshold, except for going from a household of 5 to a household of 6, which adds just

$3,000 to the threshold (Vittana, 2019). About 7% of the US population, or more than 20 million

people, live with an income that is 50% of the current poverty threshold. People living in

households in the US that have an income level below the Federal poverty threshold have more

than double the rates of violent victimization compared to individuals in high-income households

(Vittana, 2019). An increase in population growth and a higher poverty rate will increase the

workload of 9-1-1 telecommunicators, which requires the right leadership to increase

organizational commitment within PSAP's.

D. Literature Search Strategy

Many databases were accessed to conduct the search of the scholarly literature on the

topics of leadership and employee organizational commitment. These included *EBSCOHost*,

Emerald Insight, *ProQuest*, *PsychArticles*, and *ScienceDirect*. Internet searches and Google

Scholar were used to access other relevant peer-reviewed journal articles. In performing the

literary searches, the following keywords were used: *organizational commitment, employee*

motivation, organizational performance, *public and private organizations*, *perception of support,*

leadership style, *the impact of leadership to employees,* and *human resource policies, 9-1-1,*

telecommunicators. Research through EBSCOhost (accessing all databases), revealed a dearth of

relevant studies on 9-1-1 telecommunicators and leadership. Researching "9-1-1

Telecommunicators" resulted in 81 results (Academic Journals (40), Journals (36), Dissertations

(3), and Magazines (2)). With leadership added to the search, the results reduced to 3

(Dissertations (2), News (1)).

Numerous studies have been conducted on the stress, training, retention, protocol usage, and professionalism incurred by 9-1-1 telecommunicators working in PSAPs, yet little was found on leadership and organizational commitment. This lack of focus on local and county governmental agencies, specifically PSAP's, created a gap in the literature, which this dissertation research proposal addressed. The objective of this research study was to fill the identified gap in the literature and contribute to knowledge by expanding on the thin body of literature on the relationships among leadership style (i.e., transactional, transformational, and laissez-faire), employee organizational commitment in PSAPs.

This research study is based on the Avolio and Bass's (1991) the Full Range of Leadership Theory and Meyer and Allen's (1991) Three-Component Model of Organizational Commitment. These relevant theories addressed a gap in the leadership and organizational commitment literature in regards to a PSAP. These two theories primarily steered the current study and informed discussions on interpretations of the results of the analyses for the study. The theories also enlightened discussions concerning the limitations of the study, the implications of the results of the study to scholar-practitioners, decision-makers in local and county agencies, theory, academia, and 9-1-1 telecommunicators.

This literature review explored the development of *leadership styles* and *organizational commitment* while investigating prior research and recent studies on the same. The articles reviewed in books and scholarly journals are primarily published within the last ten years. This is except for articles or books that presented classical or critical relevance to the current use of transformational leadership theory. The relevant dated articles include Burns' (1978) seminal article on transformational leadership. Also included are the Bass (1990) and Bass and Avolio

(1993), these works provide insight and explanation of Burns (1978), as described in the literature review.

One important note here, transformational leadership behaviors can be developed, taught, and learned (Bass & Riggio, 2006; Kouzes & Posner, 2007). Schruijer & Vansina (1999) showed that it is:

> More difficult developing both the willingness and ability to be more transformational. Nevertheless, it is doable. Self-reports, incidents, and collegial ratings from the workplace have been collected from 200 executives and 500 community leaders, which have validated the impact of the "Full Range of Leadership Development," a comprehensive training "programme." Generally, positive results have been obtained. Follow-ups six months to two years later suggest modest improvements in transformational leadership, particularly in those transformational factors on which participants made plans to improve. These improvements tend to be accompanied by a reduction in the use of managing-by-exception. (p. 15)

E. Leadership Practices

For organizations to run effectively, coordination and the ability for some legitimate authority to issue commands must be present (Webber, 1947/1964). Webber (1947/1964) used three classifications to describe legitimate authority: (a) rational grounds (having legal authority), (b) traditional grounds (rooted in traditional beliefs about authority), and (c) charismatic grounds so that the systematic analysis of legitimate authority could be carried out. Webber (1947/1964) explained, "The concept of 'charisma' ('the gift of grace') is taken from the vocabulary of early Christianity" (p. 328), and is nothing new. The introduction of the concept of charisma about leaders of organizations by Webber (1947/1964) laid the foundation for the study of charismatic leadership (Bass & Bass, 2008).

The study of transformational leadership finds its roots in Robert House's (1977) paper, "A 1976 Theory of Charismatic Leadership" and in James MacGregor Burns' (1978) book entitled, *Leadership*, which together inspired Bernard Bass (1985) to develop his

multidimensional transformational and transactional leadership theory (Bass, & Riggio, 2006).

Although the concept of transforming leadership was first introduced by Burns (1978), he

viewed transactional leadership and transformational leadership as opposites on a continuum, as

pointed out by Bass and Bass (2008). However, Bernard Bass (1985) empirically demonstrated

that transactional and transformational leadership were two positively correlated dimensions

rather than opposites on a single dimension (Bass & Bass, 2008). These dimensions later evolved

into the Full Range of Leadership Theory ("FRLT") (Bass & Riggio, 2006).

The FRLT includes Laissez-Faire Leadership, Management-by-exception Active,

Management-by-exception Passive, Contingent Reward, and the four components of

transformational leadership (Bass, & Riggio, 2006). These components may be participative or

directive (Bass & Riggio, 2006), see Table 2. The four components of transformational

leadership are (a) Idealized Influence, (b) Inspirational Motivation, (c) Intellectual Stimulation,

and (d) Individualized Consideration (Avolio, Bass, & Jung, 1997; Bass, 1985; Bass, & Riggio,

2006; Bycio, Hackett & Allen, 1995; Howell & Avolio, 1993). These four components are

discussed next.

Table 3.

Descriptions of Participative Versus Directive Leadership and the Components of the Full Range of Leadership Model

Component	Participative	Directive
Laissez-fair	"Whatever you think is the correct choice is okay with me."	"If my followers need answers to questions, let them find the answers themselves."
Management by-exception	"Let us develop the rules together that we will use to identify mistakes."	"These are the rules, and this is how you have violated them."
Contingent reward	"Let us agree on what has to be done and how you will be rewarded if you achieve the objectives."	"If you achieve the objectives I have set, I will recognize your accomplishment with the following reward…"
Individualized consideration	"What can we do as a group to give each other the necessary support to develop our capabilities?"	"I will provide the support you need in your efforts to develop yourself in the job.
Intellectual stimulation	"Can we try to look at our assumptions as a ground without being critical of each other's ideas until all assumptions have been listed?"	"You must reexamine the assumption that a cold fusion engine is a physical impossibility. Revisit this problem and question your assumption."
Inspirational motivation	"Let us work together to merge our aspirations and goals for the good of our group."	"You need to say to yourself that every day you are getting better. You must look at your progression and continue to build upon it over time."
Idealized influence	"We can be a winning team because of our faith in each other. I need your support to achieve our mission."	"Alea icta ist (i.e., "I have made the decision to cross the Rubicon, so there is no going back"). You must trust me and my direction to achieve what we have set out to do."

Note. Adapted from "The Full Range of Leadership Development Programs: Basic and Advanced Manuals," by B. J. Avolio and B. M. Bass, 1991, pp. 5.5-5.6. Copyright 1991 by Bass, Avolio and Associates. Reprinted with permission.

First, *Idealized Influence* primarily encompasses two aspects of transformational leadership behavior (Bass & Riggio, 2006). One, leaders behave as role models encouraging followers to relate to them and to emulate them (Bass & Riggio, 2006). Two, leaders are admired, respected, and trusted by followers and associates who endow the leader as having extraordinary capabilities, persistence, and determination (Bass & Riggio, 2006).

Second, *Inspirational Motivation* describes how transformational leaders behave to inspire followers. They display excitement, a positive outlook, a commitment to goals, and they display a commitment to a shared vision (Bass & Riggio, 2006). Transformational leaders arouse team spirit among followers by making their work challenging They infuse work with meaning through follower involvement in the envisioning of a desirable future for themselves, each other, and the organization as a whole (Bass, & Riggio, 2006).

Third, *Intellectual Stimulation* describes how transformational leaders behave to encourage innovation and creativity: (a) they question follower assumptions, (b) they reframe problems, and (c) they approach situations in new ways (Bass, & Riggio, 2006). In addition, transformational leaders create a climate where mistakes can be made and where differences in opinion from the transformational leader are accepted because new ideas and approaches are desired (Bass & Riggio, 2006).

Fourth, *Individualized Consideration* describes the transformational leader's ability to see followers as unique individuals with individual needs and to accept them as such (Bass, & Riggio, 2006). The transformational leader behaves in ways which allow consideration for the needs of individual followers (Bass & Riggio, 2006). The leader acts as a personal coach and mentor and encourages two-way communication to understand each follower's individual needs for achievement and growth (Bass & Riggio, 2006). The leader uses this information to develop

followers through individualized consideration, such as creating a firm structure for some followers while giving others more autonomy according to individual needs (Bass & Riggio, 2006). Delegation is a means used by the transformational leader to develop independent followers (Bass & Riggio, 2006) not to control them and keep them dependent. The transformational leader treats each follower as a person, not just a means to the desired end (Bass & Riggio, 2006). The leader listens attentively and remembers past conversations with individuals. He or she knows the individual follower's concerns (Bass & Riggio, 2006).

Other transformational leadership theorists have found similar transformational leadership behaviors to those described by Bass and Riggio (2006). Tichy and Devanna (1986) found seven characteristics of transformational leaders. They: (a) identify themselves as change agents, (b) are courageous individuals, (c) believe in people, (d) are value-driven, (e) are lifelong learners, (f) have the ability to deal with complexity, ambiguity, and uncertainty, and (g) are visionaries (pp. 271-280). Kouzes and Posner (1987; 2007) found five practices of exemplary leaders.

Table 4.

Behaviors Specified in Charismatic, Transformational, and Visionary Theories of Leadership

	Webber, 1947	House, 1977	Burns, 1978	Bass, 1985	Bennis and Nanus, 1985	Conger and Kanungo, 1987	Sashki, 1988	Shamir et al., 1993
Visionary	X	X	X	X	X	X	X	X
Frame alignment								X
Empowering								
Showing confidence in and respect for	X	X	X	X	X	X	X	X
followers	X							X
Setting challenging expectations								
Role modeling								
Setting personal	X	X		X		X	X	X
example	X	X		X			X	X
Showing self-confidence								
Image building								
Establishing		X				X	X	X
trustworthiness	X	X				X	X	X
Displaying competence								
Behaving exceptionally	X				X	X	X	X
Taking risks	X					X	X	X
Supporting								
Showing consideration and/or concern				X			X	
Adapting								
Showing versatility							X	
Environmentally sensitive						X	X	
Intellectually stimulating				X				X

Note. From "Towards the Integration of Transformational, Charismatic, and Visionary Theories," by R. J. House & B. Shamir, In M. M. Chemers & R. Ayman (Eds.), Leadership Theory and Research: Perceptions and directions, p. 85. Copyright 1993 by Academic Press.

These leaders: (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart. Similar in many ways to Kouzes and Posner's (1987) leadership practices theory, Lowe (2010) thought that effective leaders should

employ six qualities: (a) inspire yourself and others, (b) be caring and connected, (c) be trustworthy and trusting, (d) be action-oriented, (e) empower others, and (f) be self-aware (p. 127).

Bass and Riggio (2006) described the leader who exhibits charisma but is a personalized charismatic leader as *pseudo transformational*, or as an *inauthentic transformational leader*. According to Bass and Riggio (2006), each component of transactional and transformational leadership may be examined to discover if a leader is authentic or inauthentic (see Table 5).

Table 5.
Moral Elements of Transformational and Transactional Leadership

	Transactional Leadership
Leadership Dynamic	Ethical Concern
Task	Whether what is being done (the end) and the means employed to do it is morally legitimate
Reward system	Whether sanctions or incentives impair effective freedom and respect conscience
Intentions	Truth telling
Trust	Promise keeping
Consequences	Egoism versus altruism—whether the legitimate moral Standing and interests of all those affected are respected
Due process	Impartial process of settling conflicts and claims
	Transformational Leadership
Idealized influence	Whether "puffery" and egoism on the part of the leader predominates and whether the leader is manipulative or not
Inspirational motivation	Whether providing for true empowerment and self-actualization of followers or not
Intellectual stimulation	Whether the leader's program is open to dynamic Transcendence and spirituality or is closed propaganda and a "line" to follow
Individualized consideration	Whether followers are treated as ends or means, whether their unique dignity and interests are respected or not

Note. From "Ethics, Character, and Authentic Transformational Leadership Behavior," by B. M. Bass and P. Steidlmeier, *Leadership Quarterly, 10*(2), p. 185. Copyright 1999 by Elsevier.

F. Organizational Commitment Practices

The concept of organizational commitment finds its roots in the Human Relations Movement, which occurred in the early to mid-nineteen-hundreds (Baruch, 1998). It is well established in the management and behavioral sciences (Baruch, 1998). Bass and Riggio (2006) wrote:

> There is a commitment to the broader organization, to the workgroup or team, and the leader. There is a commitment to the task and one's career. There is also a moral commitment to one's own beliefs and values, to the values of others in the organization, and the values of the organization as a whole. (p. 34)

Contemporary research (Akhtar, 2014) defined organizational commitment as an employee's evaluative assessment of the employing organization. Wang and Hwang (2012) speculated that an organization should be committed to its employees and employees should be committed to the organization.

Research literature states that organizational commitment is defined as a subordinate's identification with the mission, goals, and vision of the organization (Keskes, 2014). Researchers describe the degree of employee involvement in a job as organizational commitment; it is also attributed as employee faithfulness and loyalty of employee towards the success of the organization where committed workforce have a lesser rate of absenteeism and higher retention and exert higher energy level in jobs (Muthuveloo, & Rose, 2005). Intended for the organizations' continuous success, employee willingness to stand loyal and express the best concerns for the well-being is the organizational commitment (Luthans, 2007).

As described by Mowday, Steers, and Porter (1979), organizational commitment has three components: "(a) a strong belief in and acceptance of the organization's goals and values; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a strong desire to maintain membership in the organization" (p. 226). An individual remaining at an

organization does not imply organizational commitment in and of itself; nor does it imply job satisfaction:

> The fact that the individual continues to work for an organization is not proof that he and the organization have learned to get along well together so that he receives a high level of individual satisfaction and the organization receives a high level of performance. If a person stays with an organization, it also does not necessarily mean he is identified with it or is strongly committed to it and its objectives. It may merely mean that the individual does not have available a more attractive alternative job. (Porter, Lawler, & Hackman, 1975, p. 217)

Meyer and Allen's (1991) definition of organizational commitment is positioned on an employee's intention to continue with an organization. The concept of organizational commitment has evolved. It was during the early 1970s to mid-1990s that the concept of organizational commitment emerged as a significant concept that linked commitment to job satisfaction in the workplace. Mowday (1998) accounted for 29 articles in the 1970s, 100 in the 1980s, and 186 in the 1990s in the literature.

Allen and Meyer (1991) discussed affective commitment as a strength generated by the employee's identification with the organization and their loyalty to the nature of the job performed in the workplace. According to Allen and Meyer (1991), continuance commitment is the need or desire to remain within a specific organization. According to Clugston, Howell, and Peter (2000), continuance commitment is affected by employees' perceptions regarding alternative job prospects and the cost of leaving an organization.

According to Allen and Meyer (1991), normative commitment is a perceived obligation of remaining with a specific organization. According to Parkes and Langford (2008), benefits will far outweigh the need to seek alternative employment, and the rewards for performance will supersede against job dissatisfaction and a lack of employee commitment.

Etzioni's (1961) model of commitment specifies three sources of organizational

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control and corresponding forms of employee commitment within the organization. Each form of commitment develops in response to the form of control exercised over the individual employee. Etzioni's position asserted that the opposite of moral involvement is zero moral involvement rather than alienation; the opposite of alienated involvement is zero alienation rather than moral involvement.

According to Penley and Gould (1988), they argued in favor of two predominant views of organizational commitment: affective and instrumental. In the instrumental view of organizational commitment, an employee replaces personal involvement for compensation. This view solidifies a commitment to the organization. Therefore, Etzioni's model of organizational involvement states that extrinsic reward is more important than any other factor relating to commitment in the workplace.

Jaros, Jermier, Koehler, et al. (1993) also described a model of commitment with three components: (a) affective, (b) continuance, and (c) moral. In this model, affective commitment refers to "…the degree to which an individual is psychologically attached to an employing organization through feelings such as loyalty, affection, warmth, belongingness, fondness, pleasure, and so on" (Jaros et al., 1993. Continuance commitment refers to the degree to which an employee perceives being unable to leave an organization because of the associated high cost of leaving (Jaros et al., 1993). Finally, moral commitment refers to the degree an employee has internalized organizational goals, values, and missions (Jaros et al., 1993).

Although Meyer and Herscovitch (2001) found significant similarities between their own model and the model presented by Jaros et al. (1993), they noted a distinction, stating "Moreover, Jaros et al.'s definition of moral commitment (internalization of goals and values) corresponds more closely to Meyer and Allen's definition of affective commitment than to their

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definition of normative commitment" (p. 307). Allen and Meyer (1990) found that their affective commitment scale was highly correlated to their normative commitment scale, and they concluded that affective attachment to an organization might not be independent of feelings of obligation to an organization.

Jaros (2010) wrote that the commitment to change reduces employee turnover and increases job satisfaction and organizational commitment. Solinger, Olffen, and Roe (2008) discussed the inconsistencies in the Three-Component Model and the lack of empirical support for this theory. Although the Three-Component Model is often used to predict employee turnover, Solinger et al. (2008) discouraged its application within the discipline of organizational behavior.

Stinglhamber, Marique, Caesens, et al. (2015) and her constituents disagree regarding the concept of organizational commitment. Mathieu and Zajac (1990) believe that a great divide exists that separates the elements of attitude and commitment. The withdrawal process is also a factor that has been debated among scholars. Job dissatisfaction can create social tendencies to leave. Jaros (2010) believed that managers that can get the employees to execute on new goals, schedules, policies, and procedures might have a better viewpoint of when to implement critical business activities than those without a strategic mission. This viewpoint is well-known as the commitment to change.

The commitment to change indicates a condition in which employees are mindful of a challenge that necessitates a change, have the skills needed to execute them, are empowered and motivated to execute them by intrinsic and extrinsic rewards and communicate the vision represented by the transformation.

G. Empirical Orientation for the Study

Bass's (1985) original theory on the full range of leadership styles included four transformational and two transactional leadership factors. After approximately five years, Avolio and Bass (1991) expanded the Full Range of Leadership Theory with an examination of the relationship between transformational and transactional leadership styles and organizational performance.

H. Studies of Leadership

There are many different leadership styles that researchers have recognized. Using a five-point Likert-type scale, Salman, Riaz, Saifullah, et al. (2011) quantitatively measured three leadership styles: laissez-faire, transactional, and transformational leadership styles. Salman et al. (2011) randomly selected 388 employees from different levels of an organization to evaluate the different styles of leadership exhibited by supervisors. The research focused on investigating the hypotheses that the independent variables (IVs), *transactional leadership* style, and *transformational leadership* style, had a statistically significant direct correlation with employee job performance. Another hypothesis was that the *laissez-faire leadership* style (IV) negatively correlated to the dependent variable (DV), employee job performance (Salman et al., 2011).

The findings confirmed the hypotheses and revealed that (a) both transactional Leadership style and transformational leadership style were positively correlated to the DV, and (b) laissez-faire leadership style was negatively correlated to the job performance of employees (Salman et al., 2011). Salman et al. concluded that, among the three leadership styles, the most common was the transactional leadership style (TCLS) and transformational leadership style (TFLS).

Transactional style of leadership. Liu, Liu, and Zeng (2011) investigated the association between transactional leadership style and team innovativeness, and the moderating and mediating roles of emotional labor and team efficacy on team innovativeness. Data were gathered from 90 Chinese workgroups. Each workgroup was composed of 90 leaders and 462 team members. Liu et al. (2011) found that transactional leadership style was negatively correlated with the innovative capacity of the team, specifically when emotional labor was high among employees. Also, in the study, Liu et al. found that the correlation between transactional leadership and team innovativeness was positive in instances of low emotional labor. The effectiveness of the team mediated the interactive effects of both emotional labor and transactional leadership on team innovativeness.

In another research study, Chaudhry and Javed (2012) explored how transactional leadership influenced employee motivation in the Pakistan banking industry. Chaudhry and Javed (2012) aimed to ascertain which style of leadership was fit to boost employees' level of motivation and quality of work for the organization. Using a sample of 278 participants, Chaudhry and Javed found that results indicated the level of motivation in terms of transactional leadership was low due to minimal to zero levels of management interference (Chaudhry, & Javed, 2012). Transactional leadership was not observed to increase employees' motivational levels compared to other types of leadership styles (Chaudhry, & Javed, 2012). Instead, transformational leadership was found to have a significant and positive association with the employee's organizational commitment (Chaudhry, & Javed, 2012). Nevertheless, traditionally, government agencies have been bureaucratic, and the leadership styles in bureaucratic agencies have been linked to the transactional leadership style (Nikezić, Purić, & Purić, 2012).

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Transformational style of leadership. Hannah and Avolio (2011) found that the attitudes of managers who employed transformational leadership methodologies were more agreeable, as compared to other leadership styles. Published research has linked transformational leadership to employee engagement (Breevaart et al., 2013), employee performance (Tse and Chiu, 2014), leadership communication (Men, 2014), and organizational learning culture (Prieto & Verma, 2012). Transformational leaders are capable of influencing other employees to become committed to the organization, to work harder for the organization, and to perform far beyond what supervisors expect from the employees (Munir, Rahman, Malik, et al., 2012). Breevaart et al. (2013) identified these types of leaders arouse, inspire, and encourage subordinates to achieve their aspired objectives and goals. Breevaart et al. (2013) observed with 72 participants in a multilevel regression analysis that transformational leadership and conditional rewards brought about a suitable working environment with a high level of support and employee autonomy.

Transformational leadership is based on a mutually beneficial interchange between a leader and follower that extends beyond the transactional leadership and fosters an emotional connection between leader and followers (Tebeian, 2012). Not all researchers agree. Grant (2008) claimed that evidence in the literature revealed a negative side to transformational leadership. Eisenbeiß and Boerner (2013) pointed out that leadership literature has concentrated mainly on the constructive outcomes of transformational leadership research while ignoring evidence of the drawbacks. Researchers must not turn a blind eye to the negative effects of transformational leadership and how it affects employees and the organization.

Muterera, Hemsworth, Baregheh, et al. (2015) conducted a study to compare the leadership within government agencies at the CEO level using a sample of 372 leader-followers. Structural equation modeling was used to determine if follower perceptions of the leader's

transformational leadership are related to job satisfaction and organizational performance? The findings indicated that transformational leadership and organizational performance was strongly mediated by job satisfaction, based on the follower's perception.

Muterera et al. (2015) postulated that the development of transformational leadership in managers or executives of government organizations could increase organizational performance. Though transformational and transactional leadership styles put the needs of the organization first, just like with other leadership styles, there are contrasting differences between them.

I. Studies of Organizational Commitment

Although the issue of causal direction may vary, numerous studies conducted in multiple industries and nations, have found a significant relationship between job satisfaction, organizational commitment, and turnover (Lambert, Hogan, & Altheima 2010; Rosati, Marren, Davin, et al., 2009; Yucel, & Betkas 2012). Three-Component Model (TCM) defines organizational commitment as a psychological state which strengthens an individual's ties with an employing organization (Johnson, Groff, & Taing, 2008; Meyer & Allen, 1991).

Commitment on behalf of the employee is represented as a positive relationship, that could potentially add meaning to the life of the individual. In contrast, commitment on behalf of the organization solidified increased performance, reduced turnover, and replicated a desire for job satisfaction (Mowday, 1998). Donovan (2015) discovered a positive correlation between organizational commitment and job satisfaction.

According to Pepe (2010), when the employees' commitment (affective and continuance) and job satisfaction increased, their intent to leave significantly decreased and resulted in longer organization tenure. Thus, employees that possessed an increased affective commitment

generally have the desire to stay with an organization and thus have a more significant organizational commitment.

According to Aghashahi, Davarpanah, Omar, et al. (2013), data collected among 300 employees in a contact center in Kuala Lumpur showed leadership styles influence organizational commitment:

> Both leadership styles, which are transformational and transactional, have medium positive effects on affective organizational commitment. Comparing the leadership styles, transformational leadership style has the strongest and most positive correlations with affective organizational commitment which is developed when the employees recognize the value of their identity in their organization with an emotional attachment to the organization will be motivated to make a greater contribution to shape the organization's vision. The results of this study provide clear and practical messages for managers. They suggest that an active leadership style is essential for the development of subordinate's organizational commitment. (pp. 4-5)

Yousef (2000) examined the linkages between leadership behavior and organizational commitment in 50 major organizations in the United Arab Emirates. The sample consisted of 430 employees. The study found significant positive relationships between leadership behavior and organizational commitment. Employees are highly committed to their organizations, more satisfied with their jobs, and produce higher job performance when they work under the supervision of leaders who adopt consultative or participative leadership behavior (Yousef, 2000).

A hierarchal regression analysis with 285 managers performed by Bycio, Hackett, & Allen (1995) found a strong positive correlation with transformational leadership components and affective commitment; this relationship was significantly higher than the correlation of transformational leadership components with continuance commitment or with normative commitment. Bycio et al. (1995) suggested transformational leaders have a moral sense of obligation to their organization which is adopted by associates, and the small but significant

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correlation of normative commitment to the transformational leadership components may be due in part to the influence of less moral associates (apart from the leader) within the organization.

Tett and Meyer (1993) conducted research that measured how affective commitment developed over time as employees experience enhanced job satisfaction that, in turn, had an indirect impact on an individual's intention to resign from an organization. Although the authors claimed its underlying assumption restricted the research that the two motivational constructs and any mediating affects could be easily be operationalized and measured, there has been widespread support for assuming that affective commitment included a strong belief, acceptance, or congruence with the mission, vision, and values of an organization. Further, Tett and Meyer (1993) claimed that an individual's level of affective commitment positively correlated with willingness to exert effort to benefit the company.

Job satisfaction was assumed to be an effective response to an evaluation of the facets of a job. In support of the hypothesis, Tett and Meyer (1993) concluded that although job satisfaction and affective commitment were moderately related, they acted independently upon decisions to quit an organization. Yang (2012) argued that a relationship between leadership, commitment, and loyalty translates into enhanced job performance. Organizational leadership must maintain an active effort to ensure all employees feel needed, accepted, and wanted. Jaros et al. (1993) used structural equation modeling to determine the effects of the attitudes associated with a commitment on employee turnover. Jaros et al. (1993) determined that future research is needed to support the existence of a relationship between employee commitment and turnover.

J. Theoretical Orientation for the Study

The modernist perspective takes an objective or positivist view in the creation of

knowledge and may lend itself to quantitative research seeking to improve efficiencies

using "easy-to-measure" control variables based on the five senses (Creswell, Lefroy, Breen, et

al., 2010; Crotty, 1998). This study was supported by Avolio and Bass's (1991) Full Range of

Leadership Theory and Meyer, Allen, and Smith's (1993) Three-Component Model of

Organizational Commitment (TCM).

These are the relevant theories that address a gap in the leadership and organizational

commitment literature. These theories guided, informed, interpreted, and analyze the study. The

theories informed discussions concerning the limitations of the study, the implications of the

results of the study to scholars, decision-makers, theory, and employees.

The Full Range of Leadership Theory was used in this study to form the theoretical

orientation for the study. This theory presents the theoretical framework used to select the

constructs for the study. The idea is that measuring the perceptions of the employees, instead of

the actual behaviors of the managers, is vital to understanding employee outcomes.

A review of the transformational leadership literature shows idealized influence,

inspirational motivation, intellectual stimulation, and individualized consideration are critical

components of effective leadership. Social construction theory then treats that relationship

perception as an experienced reality, allowing this study to treat the perception of leadership by

followers as a source of measuring the leadership of the managers, then comparing those

measures against reported outcomes of employee organizational commitment to that job. The

synthesis of these theories requires only measurement of the employee's perception of their

managers to compare to their perception of how satisfied they are with their jobs and how

committed they are to their organization.

Full Range of Leadership Theory

The study's baseline theme was grounded by Avolio and Bass's (1991) Full Range of Leadership Theory. When Bass (1985) put forward the Full Range of Leadership Theory, he argued that the existing theories of leadership mainly focused on the identification and comprehension of the goals of followers and the perceptions of how leaders reward or appraise followers' behavior. Bass stated that the existing theory on the transactional leadership style was deficient in terms of considering the influence of the leader on the behavior of the follower. In principle, the Full Range of Leadership Theory shows leaders must understand their ability to influence the behavior of their followers to help them achieve optimal performance levels through the incorporation of a transformational style of leadership to existing leadership styles.

Bass (1993) said that Burns' (1978) theory was seminal, a paradigm shift in leadership studies. Transformational leadership theory conceptualized in the late 1970s proposed that leaders could motivate followers through a shared vision and mutual interest to uplift the entire organization to a higher morality (Burns, 1978). Burn's theory led to Bass developing the Full Range of Leadership Theory.

Three-Component Model

Meyer and Allen's (1991) Three-Component Model of Organizational Commitment is one of the strongest theories showing the effects of organizational commitment by an employee. Seminal thinkers (Meyer & Allen, 1991; Meyer, Allen, & Smith, 1993) developed the Three-Component Model (TCM) of Organizational Commitment that continues to prove a popular topic in management literature. According to the TCM, an employee's psychological condition either reinforces or diminishes the perceived link with an employing organization (Meyer & Allen, 1997; Taing, Granger, Groff, et al., 2011).

Meyer and Allen (Allen & Meyer, 1990; Meyer & Allen, 1991) described in their Three-Component Model model how organizational commitment comprises: (a) affective commitment, (b) continuance commitment, and (c) normative commitment. Affective commitment involves employee emotional attachment to, identification with, and involvement in an organization (Meyer & Allen, 1991). Continuance commitment involves employee anticipated costs of leaving an organization (Meyer & Allen, 1991). Finally, normative commitment involves an employee's sense of obligation to stay at an organization (Meyer & Allen, 1991).

This theory claimed the three components do not share an equally strong relationship with employee turnover with affective commitment boasting the strongest association. Yang (2012) claimed employee satisfaction to be at the root of intentions to leave and organizational turnover. According to Mishra, Mishra, and Grubb (2015), affective commitment and employee turnover are linked statistically to employees and managers. Kuo, Lin, and Li (2014) also claimed that employee satisfaction had become an important indicator of healthy work environments.

Allen (2003) determined through extensive research; employees who are committed to the organization are less likely to leave and are more likely to be productive. Meyer and Herscovitch (2001) describe commitment as a specific mindset that compels an individual toward a course of action.

K. Chapter Summary

This chapter offered a review of existing literature that relates to the origins of transformational and transactional leadership and organizational commitment. The literature reveals that there is no agreed-upon definition of leadership. The study of leadership is continuing to develop over time. Organizational commitment is controlled fundamentally by

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leadership. The study's baseline theme was grounded by Avolio and Bass's (1991) Full Range Leadership Theory, and Meyer and Allen's (1991) Three-Component Model of Organizational Commitment. Chapter 3 will provide details on the research methodologies, research questions, and data analysis.

Chapter 3: Research Methodology

The foci were to identify and define the relationship between the predictor variables (transformational, transactional, and laissez-faire leadership behaviors) as well as organizational commitment in relation to Public Safety Answer Point (PSAP) administrators and their impact on 9-1-1 telecommunicators.

The purpose of conducting this cross-sectional, non-experimental research study was to identify and describe the 9-1-1 telecommunicator's organizational commitment based on the PSAP leadership categories. The study evaluated the perceptions of 9-1-1 telecommunicators about which leadership styles and behaviors influence their organizational commitment. The findings permit PSAP administrators to modify and implement specific leadership behaviors that support organizational commitment for 9-1-1 telecommunicators. Chapter 3 includes a detailed description of the following sections: research questions and hypothesis, study and research design appropriateness, participant selection, protection of participants, measures, instrumentation, instrument reliability and validity, data analysis, ethical considerations, demographic information, collection of data, limitations, and the chapter summary.

A. Leadership Methodologies

Four survey instruments that measure transformational leadership behavior were considered for this research study. They include Bass and Avolio's (1997) Multifactor Leadership Questionnaire (the MLQ (5X-Short)), the Transformational Leader Behavior scale (TLB) (Podsakoff, MacKenzie, Moorman, et al., 1990), the Leadership Practices Inventory (LPI) (Posner & Kouzes, 1988), and the Global Transformational Leadership scale (GTL) (Carless, Wearing, & Mann, 2000).

Each one of the survey instruments has its merit. However, the MLQ was the best choice for this research. The MLQ (5X-Short) (Bass & Avolio, 1997), is the current revised edition of the survey, which incorporates 36 standardized items plus nine items measuring outcomes (Bass & Riggio, 2006). The MLQ (5X-Short) was the instrument disseminated to the potential participants. This survey instrument uses a 5 point Likert scale. The MLQ (5X-Short) is used to assess all nine components of the FRL theory (Bass & Riggio, 2006), as previously discussed. One problem with using the MLQ (5X-Short) is that factor analysis indicated combining the charisma and inspirational leadership components into one factor, and combining the passive management by-exception and the laissez-faire components into one factor may provide a better factor model then keeping all nine factors separate as it is in the FRL theory; the rest of the factors can stand alone as separate factors (Avolio, Bass & Jung, 1997, 1999; Bass & Riggio, 2006).

B. Organizational Commitment Methodologies

Two survey instruments measuring measure the organizational commitment of followers were researched for this study, the Organizational Commitment Questionnaire (OCQ) (Mowday et al., 1979) and the Organizational Commitment Scale (OCS) (Allen & Meyer, 1990). Both the OCQ and OCS survey instruments have their merit. However, the OCQ was the best choice for this research. The most widely used definition of organizational commitment is the one developed by Porter, Steers, Mowday, et al. (1974) and the most widely used instrument to measure organizational commitment is the OCQ developed by Mowday et al. (1979) to measure organizational commitment as described by Porter, et al. (1974) (Azeem, 2010; Takemura 2012; Yousef, 2003). The OCQ is a five-point Likert scale survey with 15 questions (Mowday et al.,

1979). The scales range from 1 (strongly disagree) to 5 (strongly agree), where the mean score denotes a summary indicator of follower commitment to the organization (Mowday et al., 1979).

The MLQ and OCQ have been proved both reliable and valid in earlier studies. Both instruments aligned with the research questions for this study.

C. **Research Question**

"The research question inquires about the relationships among the variables that the investigator seeks to know and is prevalent in survey studies" (Creswell, 2009, p.132). This research study utilized five research questions to examine the relationship between leadership practices defined by the Full Range Leadership Theory and organizational commitment in the PSAP workforce.

1. What is the personal and professional profile of individuals serving as 9-1-1 telecommunicators in Northern Florida?

2. What are the organizational commitment perceptions of 9-1-1 telecommunicators in Northern Florida?

3. What are the perceptions of 9-1-1 telecommunicators of their direct supervisors' leadership practices?

4. To what extent is there a correlation between a 9-1-1 telecommunicator's organizational commitment level and their perceptions of their direct supervisors' leadership practice?

5. What are the professional development training needs of 9-1-1 telecommunicators in Northern Florida?

D. Study Design

This research study utilized a quantitative method with correlational design. In 2009, Creswell stated, quantitative research problems are best addressed by understanding what factors or variables influence an outcome. Quantitative research typically tries to measure variables in some way, perhaps by using commonly accepted measures of the physical world (rulers, thermometers, oscilloscopes) or carefully designed measures of psychological characteristics or behaviors (tests, questionnaires, rating scales) (Leedy & Ormrod, 2010). In correlational studies, researchers gather data about two or more characteristics for a particular group of people or other appropriate units of study, and these data reflect specific measurements of the characteristics in question (Leedy & Ormond, 2010).

The research process involved direct data collection from participants via electronic surveys administered through email. PSAPs are organizations with a dynamic environment where change happens constantly. The dynamic environment is both on the human side and the technology side. A cross-sectional design was appropriate for the researcher did not intend to repeat data collection at a future date. In addition, a cross-sectional design, although not limited to, descriptive statistics, is ideal for descriptive statistics (de Vaus, 2001; O'Leary, 2010).

E. Study Setting

The researcher sent out a request for participation to conduct this study to administrators of PSAP's in northern Florida. Permissions were granted to conduct the study in nine PSAP's from the leadership in northern Florida. The participants for the study completed the surveys while they were working their shift in the PSAP on a not to interfere basis of their primary duty of call taking.

F. Research Design

Creswell (2009) identified quantitative, qualitative, and mixed methods as the main methodologies in research. A quantitative research methodology was utilized to conduct this study. "In quantitative studies, the researcher uses theory deductively and places it towards the beginning of the proposal for the study with the objective of testing the theory rather than developing it" (Creswell, 2009, p.149).

The research design is consistent with the research question: "What is the relationship between two variables of an interval level of measurement?" The selection of the research design followed the guidance that quantitative research involves asking specific and narrow questions, data collection from survey participants, statistical analysis of the data, and presentation of the data in an objective manner (Creswell, 2005).

Non-experimental research is ideally suited for describing a relationship between two or more variables, all without any interference from the researcher. In 2017, Price, Jhangiani, Chiang, Leighton, and Cuttler wrote that non-experimental research is research that lacks the manipulation of an independent variable. Rather than manipulating an independent variable, researchers conducting non-experimental research measure variables as they naturally occur (in the lab or real-world). The goal of correlational research is to discover relationships and provides the ability to measure the degree in which two or more variables relate without inferring cause and effect (Becker, Atinc, Breaugh, et al., 2015).

A descriptive design would not be appropriate to this research due to reporting only a percentage summary on a single variable. In contrast, a quasi-experimental or experimental quantitative design would seek to infer or imply a predictive cause and effect without considering the relationship between dependent and independent variables. The research

question measures the strength of any relationship or non-statistically significant relationship between the independent and dependent variables.

This correlational research, which is a form of quantitative investigation, seeks to accurately describe, rather than explain, predict, or control the interest. In correlational studies, researchers gather data about two or more characteristics for a particular group of people or other appropriate units of study, and these data reflect specific measurements of the characteristics in question (Leedy & Ormond, 2010). The goal of correlational research is to discover relationships and provide the ability to measure the degree in which two or more variables relate without inferring cause and effect (Becker et al., 2015).

A survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population (Creswell, 2009). Using a survey for research methodology allowed the collection of data to identify and measure the relationship between two or more variables. The predictor variables in this study consisted of the five transformational dimensions, three transactional dimensions, and one laissez-faire dimension of Bass' (1985), the Full Range of Leadership Theory, which is broken down later in this chapter. Organizational commitment was the response variable. The study determined which of the three leadership practices is more effective in influencing employee organizational commitment.

The participants in the study are assumed to have understood the questions in the survey, answered honestly, and the administrators of the PSAP would not influence the responses of the survey takers. According to Jones (1986), in 1897, Durkheim argued that causality is independent of consciousness. In 2005, Lex Donaldson added functionalism, which provided justification for decision-makers who adopt strategies and structures for optimal performance.

According to Garson (2012), violations of data level assumptions frequently occur in the social sciences and increase the real chance of falsely rejecting the null hypothesis or making a Type 1 error. This violation is a common practice when using Likert scale data in surveys that technically require interval-level data and causes the real standard error to be higher than its computed value (Garson, 2012). This debate is relevant due to the levels of measurement in this research, which supports the use of a cross-sectional Likert-type survey instrument.

G. Participant Selection

Proper sampling procedures are critical to the integrity of a study since improper procedures and sizes can introduce bias, damage generalizability, and give incorrect results for the studied population (Patten, 2012; Vogt, 2007). Fraenkel and Wallen (1990) stated, "the population is the group of interest to the researcher; the group to which the researcher wants to generalize the results of the study" (69). In 2005, Wiersma and Jurs concurred that the population of the study embraces the totality of all elements, subjects, or members that possess specific characteristics. The demographic characteristics of this study were: age, gender, tenure, and marital status.

Due to the participatory approval needed to conduct this research study, non-probability, convenience sampling was used in the selection of the sample population. Also known as accidental sampling or haphazard sampling, convenience sampling allows a researcher to investigate all subjects who are available at the time of the study (Kieres, 2012). Convenience sampling was particularly applicable in this case, for two reasons. First, it allowed all 9-1-1 telecommunicators in the population the same opportunity to complete the survey. Second, it was expected to yield higher levels of participation than random or purposeful sampling, since participation was entirely optional for all potential participants (Kieres, 2012). The total number

of 9-1-1 telecommunicators in each PSAP understudy varies from 7 to 110, and the total number of 9-1-1 telecommunicator's surveyed/total population (N) was 294.

The population for this study was all (full-time and part-time) 9-1-1 telecommunicators in nine agencies in northern Florida. All positions within a PSAP below the communication manager/director position were considered "working line operators" for the inclusion of the study. The PSAPs in northern Florida are notable in their diversity ranging from medium size (6 to 49 seats) to large (50 or more seats) and from urban to suburban. The communication director/manager was classified as the leaders associated with the independent variables (transformational, transactional, and laissez-faire leadership). All other employees below this level were considered 9-1-1 telecommunicators and constituted the subject of the dependent variable (organizational commitment).

The PSAP's in their area are homogeneous in terms of socioeconomic and racial diversity for the communities they serve. Eight of the nine PSAP administrators requested to use a point person to distribute the email with the PSAPs. The ninth PSAP allowed the researcher to email their personnel directly. Emails were used to contact the 9-1-1 telecommunicators in each PSAP detailing the study's intent, consent for the study, and links to the surveys.

H. Protection of Participants

This study used data that contained no identifying information about individuals who chose to participate in the surveys, protecting their identities and their anonymity. Data codes were assigned by Mind Garden©, Inc to all questionnaires to protect the identity of participants and to maintain the anonymity and confidentiality of participants. All data collection results will be stored on a USB memory key that will be secured on a password-protected USB memory device in a locked safe at the researcher's home. The information will be safely stored in this

locked safe, which is secured in this researcher's residence for a minimum of three years, with access only to this researcher. When no longer necessary for research, all reports and demographic questionnaire information will be destroyed.

I. Measures

The one questionnaire and two instruments which collected data for the study were (a) a demographic questionnaire, which collected data on the makeup of the characteristics of respondents, (b) the Organizational Commitment Questionnaire (OCQ) (Mowday et al., 1979), which measured responses concerning organizational commitment. (c) the Bass & Avolio (2004) Multifactor Leadership Questionnaire (MLQ) Form (5X-Short), which collected data on transformational, transactional, and laissez-faire leadership styles. These surveys captured valid and reliable data on the correlation between leaders and employees; instruments must be valid and reliable (Leedy & Ormrod, 2016). Creswell (2009) stated to evaluate the validity and reliability of the instrument, the researcher has to describe the established validity, and if possible, the reliability of the scores obtained from prior use of the instrument. The validity and reliability of the OCQ and MLQ will be discussed shortly. The results of the descriptive analyses and other analytical results that were derived from these instruments are reported in Chapter 4. The instruments are described in the following sections.

There were a total of 65 questions in the following questionnaires. Five demographic questions were asked. The five demographic questions consisted of four questions and one open-ended question. The OCQ consisted of 15 questions in the form of a five-point Likert scale regarding the organizational commitment of the 9-1-1 telecommunicators. The responses were reported on a five-point scale as follows: 1 = Strongly disagree, 2 = Disagree, 3 = Neither disagree nor agree, 4 = Agree, 5 = Strongly agree. There were 45 (MLQ) questions in the form of

a five-point Likert scale regarding the perceived leadership of the PSAP administrators. The responses were reported on a five-point scale as follows: 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly Often, and 4 = Frequently, if not always.

J. Instrumentation

Email implementation was the administration vehicle of the demographic questionnaire and the two separate instruments (OCQ and MLQ) for participants in this study. Each survey was administered through each agency's email system. Eight of the nine participating agencies appointed a point person to distribute the surveys through their internal distribution lists. The ninth agency provided the researcher with the email addresses of their 9-1-1 telecommunicators. Each survey instrument is described below, including information relative to its validity and reliability.

Each 9-1-1 telecommunicator who participated in this study received an email from their respective point person (or directly from the researcher) advising them of this research study and requesting that they complete an online survey administered by Mind Garden©, Inc., through each agency's email system. Once the survey went live (March 16th, 2020), the researcher sent the request to each PSAP point person (or directly) with a specific link to the consent form provided. Once the 9-1-1 telecommunicators electronically agreed to consent, the Mind Garden©, Inc. administered survey opened for them. The original request stated the survey would be open for two weeks. Due to the COVID-19 pandemic, this was changed to the survey being open for just over one month (close date for survey April 19th, 2020).

After ten days following the initial email request to complete the survey, a follow-up email request was sent to potential participants letting them know the survey time frame had extended. This email was to remind the 9-1-1 telecommunicators who had not yet completed the

survey instruments to please do so. Two more reminder emails were sent (April 1st and April

15th) to the 9-1-1 telecommunicators to please complete the surveys.

Upon receiving and collecting the survey information as of the closing date, the

participants' responses were imported into the IBM SPSS software program to analyze the data.

The IBM SPSS results generated and analyzed descriptive statistics to determine the mean scores

of each survey instrument, frequency distributions, and demographic information from the

sample. Relevant demographic information included age, gender, tenure of employment, and

marital status.

Table 6.
Key to Dummy Coded Demographic Variables

Variable	Codes
Gender	1 = female
	2 = male
Age	1 = under 24 y/o
	2 = 25-34 y/o
	3 = over 34 y/o
Tenure	1 = less than 4 years
	2 = 4 years but less than 10 years
	3 = 10 years but less than 20 years
	4 = greater than 20 years
Marital Status	1 = Yes
	2 = No
Total	81

The outcome variable (organizational commitment) was entered as variables from the subordinate responses to the demographic questionnaire and the OCQ to determine mean scores as well and are presented through descriptive statistics.

The reliability of an instrument has to do with whether the instrument consistently measures the construct so other researchers can use the same instrument to replicate a research study and get the same or similar results (Wikman, 2006). Reliability is determined by the Cronbach's reliability coefficient, which is one of the most popular indices of reliability in quantitative studies. Reliability is measured on a scale of 0 to 100, and an instrument is considered extremely reliable if the instrument has a reliability coefficient statistic of $\alpha > .80$. The instrument is considered very reliable if $\alpha > .70$, and reliable if $\alpha > .60$; when $\alpha < .60$, reliability is considered poor to barely reliable (Reynaldo & Santos, 1999). The reliability of an instrument contributes to its validity as a reliable instrument will measure what it is supposed to measure and not something else; therefore, results from reliable instruments will be valid (trustworthy) and more generalizable (Reynaldo & Santos, 1999).

Research Question One: What is the personal and professional profile of individuals serving as 9-1-1 telecommunicators in northern Florida?

This question was answered using a frequency count and percentage table. The following demographics were used in the questionnaire: Gender, Age, Tenure, and Marital Status. Once the survey was closed, the participants' responses were imported into SPSS. Once imported, descriptive statistics were generated and analyzed to determine mean scores on each survey instrument, frequency distributions, and demographic information about the sample as a whole. Relevant demographic information included teacher gender, age, tenure, and marital status.

Table 7.

Participant Demographics	n	%
Gender		
Male	*19*	23.5
Female	*62*	76.5
Age		
1 = under 24 y/o	8	9.9
2 = 25-34 y/o	28	34.5
3 = over 34 y/o	45	55.6
Tenure		
1 = less than 4 years	30	37
2 = 4 years but less than 10 years	19	23.5
3 = 10 years but less than 20 years	15	18.5
4 = greater than 20 years	17	21
Marital Status		
1 = Yes	34	42
2 = No	47	58

One of the most important of the factors affecting organizational commitment is the demographic factors (Kaya, 2012). However, different conclusions can be reached in studies examining the relationships between demographic characteristics and organizational commitment (Kaya, 2012).

While in some studies, it was found that one or some of the demographic characteristics affect organizational commitment; in others, there is no relationship found between the same demographic characteristics and organizational commitment. For instance, in studies conducted by Cohen (2009) and Iun and Huang (2007), it was concluded that employees' age made a significant difference in terms of organizational commitment while Brown (2003) put forth that organizational commitment did not change depending on age but the level of education.

Tenure has been shown to have a positive effect on the relationship between employee organizational commitment. Attraction-Selection Attrition theory suggests that person-organization fit increases with organizational tenure (Schneider, Goldstein, & Smith, 1995). Empirical support found that employees with longer years of service relate and identify more with their organization (Dutton, Dukerich, & Harquail, 1994) and experience greater person-organization fit (De Cooman et al., 2009).

The roles of females and males are different at work and life in general (Colley & Comber, 2003). Males generally have agentic behavior patterns that lead them to behave in a competitive and achievement-oriented manner. However, females generally have communal behavior patterns that lead them to behave in a nurturing and socially oriented manner (Karakus, 2018). Female employees may be more sensitive to the verbal and nonverbal cues of their managers, both positively or negatively. They may easily develop commitment if their managers behave in a more supportive, fair, and ethical manner (Karakus, 2018).

Generally, three categories make up an individual's marital status – Married employees, Unmarried Employees, and Single parents (Tikare, 2016). Taiuwo (2003) found that there is a positive relationship between organizational commitment and marital status. In the view of Chughtai & Zafar (2006), marital status has emerged as a consistent predictor of organizational commitment. Married people have more family responsibilities and need more stability and security in their jobs, and therefore, they are likely to be more committed to their current organization than their unmarried counterparts (Tikare, 2016).

In this study, an examination of how demographics diversity may have a positive or negative affect on organizational commitment may assist leaders in their blind spots about treating each employee equally (Mitchell, 2015). Demographics help determine the specific

group of employees that correlates leadership and organizational commitment as a factor in their current agency (Mitchell, 2015).

Research Question Two: What is the organizational commitment perceptions of 9-1-1 telecommunicators in Northern Florida?

The Organizational Commitment Questionnaire (OCQ) was developed (Mowday et al., 1979) to measure the level and relative strength of individuals' commitment to the organizations in which they are employed. The questionnaire contains 15 descriptive statements that require the participant to respond utilizing a five-point Likert-style scale based on the following ratings: (1) strongly disagree, (2) disagree, (3) neither disagree nor agree, (4) agree, (5) strongly agree (Appendix 2). Scoring the OCQ is completed by tallying the sum of all questions and then dividing by 15, arriving at a summary indicator of employee commitment. The summary indicator provides a consistent gauge of employee commitment. When the instrument was devised, some of the items were phrased negatively and reverse-scored to attempt to reduce response bias (Mowday et al., 1979).

Reliability. The reliability of the OCQ was measured using two forms of reliability. Internal consistency reliability was one form used to measure reliability. Using coefficient a, .90 was reported as the median with a range from .82 to .93, and item analyses reports showed results of a positive correlation of .64 ranging from .36 to .72 (Mowday et al., 1979). Factor analysis checked the homogeneity of the items on the OCQ. To assess the stability of the instrument over time, test-retest was the second form used to measure reliability. Two samples from the nine work organizations were used in the computation of the test-retest reliabilities. When compared with other attitude measures, the items on the OCQ were homogeneous, and the overall measure of organizational commitment was stable (Mowday et al., 1979). In their meta-

analysis, Mathieu and Zajac (1990) examined 90 samples, in which 80 (*N*= 24,258) reported an average internal consistency reliability of .882 (*SD*=.038) for the OCQ (Kieres, 2012).

Validity. Mowday et al. (1979) examined validity by assessing convergent validity, discriminant validity, and predictive validity through several analyses. In order to assess convergent validity, five analyses investigated convergent validity in the OCQ instrument (Mowday et al., 1979). The OCQ was compared against three other attitude measures to investigate discriminant validity. The results from the analyses showed evidence of convergent and discriminant validity for the OCQ (Mowday et al., 1979). In their effort to validate their instrument, Mowday, Porter, and Steers administered the questionnaire to 2,563 individuals from diverse working environments, including employees from public services, universities, hospitals, banks, and the auto industry as well as scientists and engineers. The evidence for predictive validity was in the predicted direction for the relationship between organizational commitment and performance (Mowday et al., 1979). Empirical research has corroborated the outcomes of this form of attachment. From a positive perspective, employees with strong affective commitment identify and voluntarily stay with the organization, those with a strong continuance commitment stay because they need to, and those with a strong normative/moral commitment remain because they feel they ought to stay (Allen & Meyer, 1990). The OCQ possesses acceptable psychometric properties and is a reasonable instrument to measure 9-1-1 telecommunicators' organizational commitment. As a result of the OCQ being in the public domain, the researcher was not required to obtain permission to use this instrument for this study (Appendix 3).

Research Question Three: What are the perceptions of 9-1-1 telecommunicators of their direct supervisors' leadership practices?

The Multifactor Leadership Questionnaire (MLQ) was developed by Bass and Avolio (1994) to measure the difference between *transformational* and *transactional leadership* in relation to Bass' model. In Chapter 2 of this study, the Multifactor Leadership Questionnaire (MLQ) was described to measure three different types of leadership qualities (*transformational, transactional, and laissez-faire*), each displaying distinct qualities. First, the four dimensions of *transformational leadership* are measured: idealized influence (II), inspirational motivation (IM), intellectual stimulation (IS), and individualized consideration (IC). Next, the MLQ measures three dimensions of *transactional leadership*: contingent reward, including active and passive forms of management by exception. The last measurement that this instrument measures is *laissez-faire leadership*, which is frequently referred to as passive leadership. Together, the three types of leadership described here comprise what Bass and Riggio (2006) call the Full Range of Leadership Theory (FRLT) (Kieres, 2012). Table 8 provides details of each component in this model.

Table 8.
Leadership Styles Measured by the Multifactor Leadership Questionnaire

Leadership Style	Characteristics and Sample Items
Transformational Leadership	
Idealized Influence (II-A) (II-B)	The leader serves as a role model for followers and is admired, respected, and trusted.
Inspirational Motivation (IM)	The leader motivates and inspires followers by providing meaning and challenge to their work
Intellectual Stimulation (IS)	The leader stimulates followers' efforts by questioning assumptions, reframing problems, and approaching old situations in innovative ways.
Individualized Consideration (IC)	The leader pays attention to individual followers' needs for achievement and growth, acting as mentor or coach.
Transactional Leadership	
Contingent Reward (CR)	The leader gains agreement from followers about what needs to be done by offering rewards in exchange for satisfactory assignment completion.
Management by Exception – Active	The leader actively monitors followers' errors or deviance from standards and takes corrective action as necessary.
Management by Exception – Passive	The leader waits passively for errors or deviance from standards and then takes corrective action.
Laissez-Faire Leadership (LF)	The leader avoids exerting leadership or taking action on important issues.

Source: Bass & Riggio, 2006

The rating form of the MLQ includes 45 descriptive statements asking for the

participants' response based on a Likert-style five-point scale utilizing the following ratings: (0) Not at all, (1) Once in a while, (2) Sometimes, (3) Fairly often (4) Frequently, if not always. Of the 45 descriptive statements, 36 measure leadership behaviors, while nine items measure leadership outcomes (extra effort, effectiveness, and satisfaction). Of the nine questions, three associate with extra effort, four associate with effectiveness, and two associate with satisfaction (Kellish, 2014). Table 9 identifies the association between variables and questionnaire items on the MLQ (5X-Short). Lower scores indicated employees' perceptions that their immediate supervisor's leadership style was inconsistent with the description of the leadership factors. In contrast, a higher score indicated the presence of behaviors consistent with the leadership factors for transformational and transactional leadership as perceived by the employees. Permission to utilize this instrument was granted by Mind Garden©, Inc., in March 2020 (Appendix 4).

Table 9.

Multifactor Leadership Questionnaire Leadership Characteristic, Scale Name, and Item Numbers

Variable	MLQ Questions Linked to Variable
Transformational Leadership Style (Predictor Variable	
Idealized Influence: (Attributed)	10, 18, 21, 25
Idealized Influence: (Behaviors)	6, 14, 23, 34
Individualized Consideration	15, 19, 29, 31
Individualized Motivation	9, 13, 26, 36
Intellectual Stimulation	2, 8, 30, 32
Transformational Leadership Style (Predictor Variable)	
Contingent Reward	1, 11, 16, 35
Management by Exception: (Active)	4, 22, 24, 27
Management by Exception: (Passive)	
Laissez-Faire Leadership Style (Predictor Variable)	
Laissez-faire	5, 7, 28, 33
Passive Avoidance	3, 12, 17, 20
Extra Effort	39, 42, 44
Effectiveness	37, 40, 43, 45
Satisfaction	38, 41

Note. Adapted from Bass & Avolio (2004).

There exists substantial evidence demonstrating the construct validity of the MLQ in research. Bass and Riggio (2006) asserted that the instrument "had been subjected to extensive factor analysis to examine both the model of transformational leadership, the larger FRL theory (FRLT), as well as the question of whether the MLQ adequately measures these constructs." (Kieres, 2012). In a critique of transformational and charismatic leadership, Yukl (1999) reported that in studies using the Multifactor Leadership Questionnaire (MLQ) to appraise leaders, *transformational leadership* was positively related to subordinate satisfaction, motivation and performance (Northouse, 2013). Although some researchers have suggested collapsing or combining some of the nine factors, recent research (Antonakis, Avolio, & Sivasubramaniam, 2003) provided support for the multidimensional structure represented by the MLQ (Kieres, 2012).

Further, MLQ scales have demonstrated good to excellent internal consistency with alpha coefficients above the .80 level for all MLQ scales, using the most recent version of the MLQ across a large sample (Bass & Riggio, 2006). According to Nunnally and Bernstein (1994), reliability coefficient values of .70 are acceptable, while values of .80 and higher are preferable when conducting basic research (Kieres, 2012). The Multifactor Leadership Questionnaire (MLQ-5X) is the standard instrument for assessing transformational and transactional leadership behavior (Bass & Avolio, 2000; Avolio & Bass, 2004). It has been translated into many languages and used successfully by both researchers and practitioners around the world (Rowold, 2005).

The selection of the MLQ (5X-Short) was the result of its established reliability across both public and private sector work settings. As shown, Table 10 displays the reliability score of this instrument, which varies from .69 to .83.

Table 10.
Mean, Standard Deviation, and Reliability of the MLQ Scales

	$\bar{x}$	Stand Dev	Reliability
Transformational Leadership			
Idealized Influence: (Active)	2.94	.76	0.75
Idealized Influence: (Behaviors)	2.77	.72	0.70
Inspirational Motivation	2.92	.76	0.83
Intellectual Stimulation	2.78	.71	0.75
Individualized Consideration	2.85	.78	0.77
Transactional Leadership			
Contingent Reward	2.87	.70	0.69
Management by Exception: (Active)	1.67	.88	0.75
Management by Exception: (Passive)	1.03	.75	0.70
Laissez-faire Leadership	.65	.67	0.71

Note: Total Reliability Scores (US) $N = 27,285$
Source: Avolio & Bass, 2004

The instrument proved reliable and valid, whether tested with a small population as in the study conducted by Muenjohn and Armstrong (2008) or with a large population Bass and Avolio (2004). Based on the data mentioned above, the MLQ is an appropriate instrument to measure leadership styles. In addition, the MLQ is a widely used instrument used in organizational sciences to measure leadership (Tejeda, Scandura, & Pillai, 2001) in field and laboratory research (Bass & Avolio, 2004).

Respondents used the response labels to indicate the frequency their leader demonstrated a particular behavior. A low score on the frequency scale indicated the leader's perceived as displaying less of this style; whereas, a high score on a factor indicates that the leader is perceived to demonstrate this style frequently. The questionnaire took approximately 15 minutes for the participants to complete and the readability level of the questionnaire is equivalent to the ninth grade in the United States (Bass & Avolio, 2004).

Research Question Four: To what extent is there a correlation between 9-1-1 telecommunicators' organizational commitment classification and their perceptions on their direct supervisors' leadership practice?

This research intended to identify and define a relationship between the predictor variables (transformational, transactional, and laissez-faire leadership behaviors) and one outcome variable (organizational commitment). To do this, SPSS was used to run a single correlation analysis in which the nine full range of leadership behaviors (which comprise transformational, transactional, and laissez-faire leadership) and the one outcome variable (organizational commitment) were all entered as variables. The correlation coefficient selected was Pearson's correlation coefficient because that is the most common type and the one with which the researcher had the most familiarity. The type of test selected was 2-tailed. This test was selected due to not pre-supposing the direction of the relationship. After running the 2-tailed test, SPSS flagged significant correlations. The results allowed the researcher to determine which specific leadership behaviors and groups of behaviors (transformational, transactional, or laissez-faire) significantly correlated with each of the outcome variables.

Research Question Five: What are the professional development training needs of 9-1-1 telecommunicators in Northern Florida?

This question allowed the 9-1-1 telecommunicators to provide insight on the opportunities they see for improving professional development (Appendix 5)

K. Data Analysis

The analysis of the survey results was conducted with SPSS (V26) for Windows. SPSS has many integrated routines that allow for a wide array of analysis, including sampling (Alreck & Settle, 2004). Analysis of the results included frequency distribution, mean, standard deviation, and other determinations about the demographics questionnaire, the OCQ and the MLQ (5X-Short). Graphical and pictorial presentations, such as histograms, were used to draw significant conclusions. The descriptive statistics provide an overview of the information collected (Sullivan, 2008). Rubin and Babbie (1993) concurred that "descriptive statistics presents quantitative data in a manageable form by reducing data to unmanageable details to manageable summaries" (p. 250). The essence of the descriptive statistics is to clarify information collected through the survey by organizing and summarizing results in graphs, tables, and pictorial presentations to make it more comprehensible to the reader (Sullivan, 2008).

The research questions guided this quantitative cross-sectional non-experimental research study: Does the PSAP administrator's leadership style affect the 9-1-1 telecommunicator's organizational commitment? Responses to the relevant questions in the surveys were extracted. Paired scores were correlated to obtain a correlation coefficient, using Pearson's product-moment correlation coefficient. When researchers want to examine the relationship between two quantitative sets of scores (at the interval or ratio levels), they compute a correlation coefficient. The most widely used coefficient is the Pearson product-moment correlation coefficient, whose symbol is r (usually called the Pearson r) (Patten, 2012, p. 123). Pearson's product-moment correlation coefficient (also known as Pearson correlation coefficient) is a standardized measure

of the strength of the relationship between two variables (Field, 2013). This procedure has been used in similar research (Singer & Singer, 2001).

A separate correlation coefficient was used to determine the relationship between the subscale pairs of transformational leadership/organizational commitment, transactional leadership/organizational commitment and laissez-faire leadership/organizational commitment. Tables were generated based on the applicable data, and the relationships among the variables were analyzed. After assessing the results and relationships among the variables, implications for the results related to transformational leadership and organizational commitment were addressed. A statistically significant level was set at the traditional .05 as determined by social scientists (Rubin and Babbie, 2009), and Cronbach's reliability coefficient was utilized to determine the internal consistency of the instruments.

HelpfulStats.com (2017) states six assumptions concerning Pearson's correlation:

1. The variables must be either interval or ratio measurements. Continuous variables are those that can take any value within an interval. Ratio variables are also continuous variables. In order to compute Karl Pearson's Coefficient of Correlation, both data sets must contain continuous variables.

2. The variables must be approximately normally distributed. Normality means that the data sets to be correlated should approximate the normal distribution. In such normally distributed data, most data points tend to hover close to the mean.

3. There is a linear relationship between the two variables. Linearity simply means that the data follow a linear relationship. Again, this can be examined by looking at a scatter plot. If the data points have a straight line (and not a curve) relationship, then the data satisfy the linearity assumption.

4. Outliers are either kept to a minimum or removed entirely. No outliers must be present in the data. While statistically, there is no harm if the data contains outliers, they can significantly skew the correlation coefficient and make it inaccurate. When does a data point become an outlier? In general, a data point that's beyond +3.29 or -3.29 standard deviations away, it is considered to be an outlier.

5. There is homoscedasticity of the data. Homoscedascity means 'equal variances.' It means that the size of the error term is the same for all values of the independent variable. If the error term, or the variance, is smaller for a particular range of values of the independent variable and larger for another range of values, then there is a violation of homoscedascity.

6. Paired observations mean that every data point must be in pairs. That is, for every observation of the independent variable, there must be a corresponding observation of the dependent variable. We cannot compute the correlation coefficient if one data set has 12 observations, and the other has ten observations.

L. Ethical Considerations

When conducting research, the researcher has to consider the ethics involved. The ethical approach of even one research or one researcher within an institution affects that institution (Paine, 1994). The University of Arkansas is committed to ensuring that researchers use safe, ethical practices when engaging in research with human subjects. Under Federal Regulations, University of Arkansas Policies and Procedures Governing Research with Human Subjects, the Institutional Review Board (IRB) is responsible for the oversight of all Human Subjects Research (HSR) (University of Arkansas, 2020). The request emails are included with this dissertation showing the change of the survey timeframe due to the COVID 19 pandemic. No identifiable information is included to protect the confidentiality of the PSAPs, administrators,

and 9-1-1 telecommunicators involved (Appendix 6). Additional approval to use this population was gained from the Institutional Review Board (IRB) at the University of Arkansas.

The collection of data began after approval of the study by the IRB (Appendix 7). Mind Garden© Inc was the online tool used to survey research participants, chosen for its simplicity and practicality for the MLQ. Mind Garden© Inc meets the criteria that most university Institutional Review Boards require when using an online survey tool to collect data. Mind Garden© Inc offers secure transmission, informed consent procedures, and database and server security. Mind Garden© Inc facilitates survey distribution via emailing a survey link or embedding the survey into websites, including social networks.

All of these distribution methods allow the participants to complete responses without being personally identified. Mind Garden© Inc allowed the data to be exported and analyzed using SPSS. The demographic questionnaire and the OCQ were distributed along with the MLQ as one survey with three sections. The results gathered from the entire survey were exported and analyzed using SPSS. The employee work emails (the point person and those in the ninth agency) were not shared with anyone other than the researcher. The mapping was stored in an Excel file on the researcher's personal SanDisk Cruzer Glide 32GB USB Flash Drive (flash drive) in a password protected folder utilizing SanDisk Secure AccessTM software for three years then destroyed. The flash drive was secured in a locked fireproof box in the researcher's home. Mind Garden© Inc. will store the data for one year, and then will be deleted.

M. Limitations

The participants in the study are assumed to have understood the questions in the survey, and they answered honestly. According to Garson (2012), violations of data level assumptions frequently occur in the social sciences and increase the real chance of falsely rejecting the null

hypothesis or making a Type 1 error. This violation is a common practice when using Likert scale data in surveys that technically require interval-level data and causes the real standard error to be greater than its computed value (Garson, 2012). This debate is relevant due to the levels of measurement in this research, which supports the use of a cross-sectional Likert-type survey instrument.

In educational research, the online survey has become a popular method of data collection (Saleh & Bista, 2017). In an assessment of studies done using web-based surveys, Shih and Fan (2008) found that the average response rate for a web survey was 34% and that web-based surveys had about a 10% lower response rate than mailed surveys (p. 257).

N. Chapter Summary

This chapter outlined the research methodologies used in this study. The OCQ and the MLQ were discussed in detail, validating their use in this research study. The research questions were proposed and defined along with the study design and the study setting. Chapter 3 presented how the participants were selected, how they were protected with anonymity, and the ethical considerations are taken into account for this study. The analysis of the survey results was conducted using SPSS (V26).

Methodologies and data analysis allowed us to answer the question of the purpose of this study. The purpose of this study was to answer the primary research question initially posed: Does a PSAP administrator's leadership style affect a 9-1-1 telecommunicator's organizational commitment in a PSAP? Chapter 4 will discuss the analysis from the results of the study.

Chapter 4: Results of the Study

A. Introduction

The purpose of the non-experimental, quantitative, correlational research study was to examine the relationship between transformational, transactional, and laissez-faire leadership practices of public safety answer point (PSAP) administrators and the organizational commitment of 9-1-1 telecommunicators in northern Florida. 294 questionnaires/surveys were disseminated, and 94 9-1-1 telecommunicators from northern Florida PSAPs responded. From the 94 responses, there 81 were completed and used for the analysis. The overall response rate was 32%. The slightly low response could be attributed to the outbreak of the COVID-19 pandemic. The survey start time coincided with the declaration of a US national emergency. 9-1-1 telecommunicators are classified as essential personnel, and the PSAPs are required to have manning 24/7. The survey period was a very anxious filled time for the 9-1-1 telecommunicators. The PSAP personnel not only had to be concerned with their personal lives being affected, but their professional lives due to being essential personnel became much busier with an increase of 9-1-1 calls and new policies and procedures. The survey timeframe opened on March 16th with an original close date of March 29th. After discussions with the dissertation chair and several PSAP administrators, the survey timeframe was extended through April 19th. The researcher utilized MindGarden©, Inc to distribute the surveys electronically via email. The 9-1-1 telecommunicators voluntarily completed the surveys consisting of a demographic questionnaire, the Organizational Commitment Questionnaire (OCQ), and the Multifactor Leadership Questionnaire (MLQ).

The demographic questionnaire completed by all participants included age, gender, tenure, and marital status. An open-ended question was also included for the respondents to explore future professional development needs and or desires.

The Organizational Commitment Questionnaire (OCQ) was the first instrument distributed. The OCQ was developed by Mowday et al. (1979) to measure the level and relative strength of individuals' commitment to the organizations (*dependent variable*) in which they are employed by developing a questionnaire that contains 15 descriptive statements relative to an employee's view of his/her commitment to his/her respective organization (Decker, 2018).

The short form of the Multi-Factor Leadership Questionnaire (MLQ-5X) was the second instrument distributed. The MLQ measures follower perceptions about various leadership behaviors (*independent variable*). This instrument, developed by Bass (1985), includes three recognized leadership components (transformational, transactional, and laissez-faire) and their associated behaviors as described in the Full Range of Leadership Theory (FRLT) (Decker, 2018).

A descriptive format presented the results of the research for this chapter. The chapter divides the results into different sections. Chapter 4 includes the data collection results, demographic, OCQ, and MLQ analysis, research question, and hypothesis, a summary of results, and the chapter summary. This research provided the PSAP administrators with a better understanding of leadership practices between PSAP administrators and their influence on the organizational commitment of 9-1-1 telecommunicators.

B. Data Collection

The collection of the data began after the University of Arkansas Institutional Review Board (IRB) granted authorization and permission to conduct the study (see Appendix 7). A pilot

study was not conducted for the study because measurement instruments validated through prior research decrease the need to test their validity (Creswell, 2014). When instruments yield the appropriate data to answer the research questions, a pilot study is not required prior to conducting research (Sproul, 2002).

The researcher first contacted the administrator of each agency by visiting their office (local agencies) or by calling them to introduce myself and the study. Participants for this study were recruited via email through their agency's respective distribution lists. A point person was assigned in eight of the nine agencies who then distributed the survey link to their personnel. The ninth agency allowed this researcher to email their 9-1-1 telecommunicators directly. Participants were contacted after obtaining permission from the PSAP administrators to conduct the study within their agency. All frontline 9-1-1 telecommunicators in each agency were invited to participate in the study. The collection of data started on March 16th, 2020, with a completion date of April 19th, 2020. The introductory email contained a study description, assurance of the protection of the identity of participants, and the confidentiality of their responses that they provided (Appendix 8).

The second email sent to the participants included the link to the survey provided by MindGarden©, Inc. This link allowed each participant to access the informed consent. Each participant in this research was asked to read the informed consent document and check the "Agree" box indicating the agreement to participate in the study. Once the informed consent document was signed, the 9-1-1 telecommunicator was able to access the instruments of the survey. The survey completion took approximately 15 minutes for the majority of the respondents. The survey completion took place while the 9-1-1 telecommunicators were on duty. Due to the nature of the 9-1-1 telecommunicator's job and the probability of interruption, the

survey link could be reused on the same computer. The survey was accessible to the participants

for just over one month. Once a week and a half had passed on receiving the initial request,

potential participants received a follow-up email asking those potential participants to complete

the survey if they had not already done so. During this time, the decision was made to extend the

survey timeframe. The agencies were contacted twice more with reminder emails requesting

completion of the studies. These request reminders were sent on April 1st and April 15th.

The cross-sectional type of survey was employed to collect data at one point in time

(Punch, 2003). The survey incorporated five demographic questions, 15 items from the

Organizational Commitment Questionnaire (Mowday, Porter & Steers, 1982), and 45 items from

the Multifactor Leadership Questionnaire (MLQ) (Avolio & Bass, 1995).

After examining the characteristics of the data, a total of 81 surveys were retained for

statistical analyses. 13 surveys were discarded due to a lack of completion. The collection of data

was adequate to support the use of correlational statistical analysis in the study with the two

variables.

C. Demographic Analysis

Demographic information was collected on the participants on the first page of the survey

(Appendix 9). The first question of the demographic questionnaire asked the gender of the

respondent. Of the 81 participants, 81 answered this demographic question. Those who

responded were 19 (23.5%) male and 62 (76.5%) female.

The second question of the demographic questionnaire asked the age of the respondent.

Of the 81 participants, 81 answered this demographic question. Respondents were asked to place

themselves in a specific age range between 18 – 24 or 25 – 34 or 34 and over. Only 8 (9.9%) of

those who answered this demographic question placed themselves in the 18-24 age range. There were 28 (34.5%) in the 25-34 range, 45 (55.6%) in the 34 and over range.

The third question of the demographic questionnaire asked about the tenure of the respondent. Of the 81 participants, 81 answered this question. 30 (37%) of those who answered this demographic question placed themselves in less than four years of employment. There were 19 (23.5%) in the greater than four years but less than ten years, 15 (18.5%) in the greater than ten years but less than twenty years, 17 (21%) in the greater than 20 years.

The fourth question of the demographic questionnaire asked the marital status of the respondent. Of the 81 participants, 81 answered this demographic question. Those who responded were 34 (42%) married, and 47 (58%) not married.

The final question of the demographic questionnaire asked for the desires of professional development for future training. Of the 81 participants, 81 answered this demographic question. This question allows the 9-1-1 telecommunicator to express possible shortcomings in training that, if implemented, will help with job performance and organizational commitment.

D. OCQ and MLQ Descriptive Analysis

Table 11 displays the descriptive statistics for the OCQ. The 9-1-1 telecommunicators were instructed to read the statements in the questionnaire and then select one of the choices on a 5-point Likert scale between strongly disagree to strongly agree that most accurately described their position about the statement. The highest mean score was attributed to items number 1 and 15. Item number 1 addressed the willingness of the 9-1-1 telecommunicator to put forth the extra effort to help the organization. Looking at the responses for item 15 (reverse scored) and a mean score of 4.5, this shows that a large number of respondents disagreed with that statement and did not feel that choosing to work for their particular PSAP was a mistake. The standard deviation of

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.84 shows that while many 9-1-1 telecommunicators disagreed with this statement, some did agree, showing a wide range of answers. The second highest mean was attributed to item numbers 6 and 13. Item 6 addresses being proud to tell others I am part of this organization. Item 13 addresses caring about the fate of the organization. The third highest mean score was attributed to item 10, which stated that they are grateful for choosing to work for the organization. Questions 3, 7, 9, 11, 12, and 15 on the Organizational Commitment Questionnaire are phrased negatively and then reverse scored. Item number 3, which addresses the loyalty the 9-1-1 telecommunicator feels toward the organization, had the highest standard deviation. The high mean score on this number shows that many 9-1-1 telecommunicators disagreed with this statement (this was a reverse-scored item). The higher standard deviation shows that some of the respondents agreed with the statement, giving a broader variance to the answers provided.

The statistical standard deviations for the OCQ range from .65 to 1.30. The higher standard deviation numbers reveal that the participants had a wide range of responses, and the higher standard deviations tended to be on the reverse-scored questions. Other studies utilizing the OCQ tool show even higher standard deviation scores (Dale & Fox, 2008; Gordon, 2007; Lee & Tao, 2005; Smothers, 2008). In a study conducted by Lee and Tao (2005) using the 7 points Likert scale OCQ, the standard deviation ranged from 2.05 to 4.04. In another study utilizing the OCQ by Gordon (2007), standard deviations ranged from 3.1 to 5.4.

Table 11.
Descriptive Statistics on Organizational Commitment Survey Questions
N=81

Survey Item	$\bar{x}$	*Stand Dev*
Willing to put in extra effort to help organization	4.50	.6500
Decision to work for organization was a mistake	4.50	.8100
Care about the fate of this organization	4.30	.7400
Proud to tell others about organization	4.30	.7800
Glad chose this organization to work	4.10	.8500
Talk up organization as great place to work	3.90	1.05
Organization inspires best job performance	3.90	.9800
Feel little loyalty to organization	3.80	1.30
Values are similar with organization's values	3.80	.9800
Not much to be gained by staying with organization	3.70	1.28
Best of all possible organizations to work	3.60	1.05
Would take little change to cause to leave	3.50	1.110
Find it difficult to agree with organization's policies	3.50	1.17
Would accept almost any job to remain with organization	3.40	1.14
Could work for another organization for similar work	3.20	1.14
Total	58.1	15.97

Descriptive statistics, including the mean and standard deviation for perceptions of

leadership styles as measured by the MLQ (5X-Short) form questionnaire, are presented in Table

12. The table shows that the majority of the respondents perceived their leaders as displaying more transformational leadership behaviors than transactional or laissez-faire. The 9-1-1 telecommunicators were instructed to read the statements in the questionnaires and then select one choice on a 5-point Likert scale (Not at all, Once in a while, Sometimes, Fairly often, Frequently if not always), which most accurately described their position about the statement. The standard deviations for this survey tool range from .76 to 1.11.

The results revealed that PSAP administrators with perceived transformational leadership practices most commonly displayed the behavior of idealized influence (a) along with inspirational motivation and then followed by idealized influence (b). The least frequently perceived behaviors in this category were intellectual stimulation and individualized consideration. For PSAP administrators with perceived transactional leadership practices, the most commonly displayed behavior was the contingent reward. The least displayed behavior was management-by-exception-passive, while management-by-exception-active fell between the two. The laissez-faire leadership practice of essentially waiting for things to go wrong before intervening was revealed to be the least perceived behavior displayed in administrators.

Table 12.
Descriptive Statistics on Perceptions of Leadership Styles
N=81

Leadership Style Perception	$\bar{x}$	*Stand Dev*
Transformational	2.6	.92
Idealized Influence-Attributed	2.7	.95
Inspirational Motivation	2.7	.97
Idealized Influence-Behavioral	2.6	1.02
Individualized Consideration	2.5	1.05
Intellectual Stimulation	2.4	.99
Transactional	2.3	.76
Contingent Reward	2.6	.95
Management-by-Exception-Active	2.0	.94
Management-by-Exception-Passive	0.85	.93
Laissez-Faire	1.0	.95
Passive Avoidance	1.2	1.11

Cronbach's coefficient alpha coefficients were estimated to examine the internal consistency of transformational, transactional, laissez-faire, and organizational commitment (Appendix 10). The results are presented in Table 13 and suggest that all reliability coefficients were in the acceptable to excellent range (George & Mallery, 2003).

Table 13.
Variable Scales with Descriptions and Cronbach's Alpha
N=81

Scale	Description	Item number	Item	α
Transformational	Idealized influence	Mean of 2, 6, 8, 9, 10, 13, 14, 15, 18, 19, 21, 23, 25, 26, 29, 30, 31, 32, 34, 36	20	.97
	Inspirational motivation			
	Intellectual stimulation			
	Individualized consideration			
Transactional	Contingent reward	Mean of 1, 4, 11, 16, 22, 24, 27, 35	8	.78
	Management by exception – Active			
	Management by exception – Passive			
Laissez-faire	Passive Avoidance	Mean of 3, 5, 7, 12, 17, 20, 28, 33	8	.91
Leadership Outcomes				
Extra Effort		Mean of 39, 42, 44	3	.92
Effectiveness		Mean of 37, 40, 43, 45	4	.86
Satisfaction		Mean of 38, 41	2	.93
Organizational Commitment		Mean of all questions	3.87	.90

E. Presentation and Analysis of Data

The research study examined four research questions and one demographic question

which addresses the relationship of leadership practices and behaviors of PSAP administrators on

organizational commitment 9-1-1 telecommunicators in northern Florida. The study focused on

the likelihood that transformational leadership predicted organizational commitment,

transactional leadership predicted organizational commitment, and laissez-faire leadership

predicted organizational commitment.

The leadership practices of PSAP administrators and 9-1-1 telecommunicator

organizational commitment provided the foundation of the hypothesis.

The primary null hypothesis generated from the primary research question was:

H1o: There is no linear relationship between the perceived leadership practices of PSAP

administrators (transformational, transactional, and laissez-faire) and the organizational

commitment level of 9-1-1 telecommunicators.

The alternative sub-hypotheses generated from the primary research question were:

H1a1: There is a positive linear relationship between the transformational leadership practices

and the organizational commitment level of 9-1-1 telecommunicators.

H1a2: There is a positive linear relationship between the transactional leadership practices and

the organizational commitment level of 9-1-1 telecommunicators.

H1a3: There is a negative linear relationship between the laissez-faire leadership practice and the

organizational commitment level of 9-1-1 telecommunicators.

F. Hypotheses Testing

To examine hypothesis 1a1, a Pearson r correlation was conducted to assess if there is a

positive linear relationship between the transformational leadership practice and the

organizational commitment level of 9-1-1 telecommunicators. The result of the Pearson r

correlation was significant, $r(81) = .352, p < .001$, suggesting that the null hypothesis was

accepted and a positive linear relationship between transformational leadership practice and

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organizational commitment level of subordinates exists. The results for the correlation between

transformational leadership practice and the organizational commitment level are summarized in

Table 14 (Appendix 11). Figure 2 presents a scatter plot depicting a positive linear relationship

between transformational leadership style and the organizational commitment (Appendix 12).

Table 14.
Correlation between Transformational Leadership Practice and Organizational Commitment
N=81

Correlation between Transformational Leadership and Organizational Commitment	
Transformational Leadership	Organizational Commitment
r	0.352**
Sig.	0.001
N	81

Note. **p < 0.001

Figure 2. Transformational Leadership Practice and Organizational Commitment

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Examining hypothesis 1ₐ1, a linear regression was conducted to assess if there is a positive linear relationship between the transformational leadership style and the organizational commitment level of 9-1-1 telecommunicators. The assumptions of linearity and homoscedasticity were evaluated through examination of the residual scatter plot. Tabachnick and Fidell (2007) state, "The residual scatter plot should reveal a pileup of residuals in the center of the plot at each value of predicted score and a normal distribution of residuals trailing off from the center." (p. 127). The residual scatter plot is presented in Figure 3, and the assumptions of linearity met favorably; however, the assumption of homoscedasticity was not met. When linearity is violated, the scatterplot shape tends to be curved (C-shaped or U-shaped); when met, the scatter plot is rectangular. When homoscedasticity is violated, the scatter plot fans-out toward one end. The spread may be several times higher for values at one end of the scatter plot compared to those at the other end. Violations of linearity and homoscedasticity weaken the analysis (Tabachnick & Fidell, 2007).
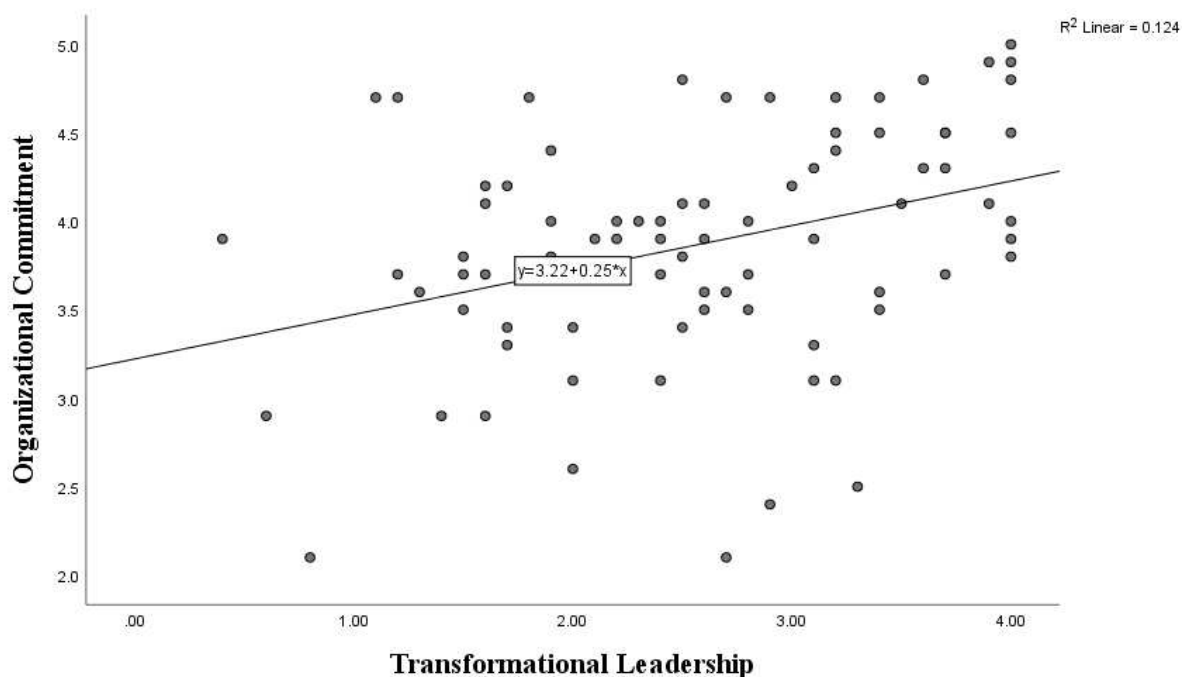

Figure 3. Transformational Leadership predicting Organizational Commitment

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The results of the regression were significant, $F(1, 81) = 11.2$, $p < .001$, suggesting that the null hypothesis was rejected (Appendix 13). Transformational leadership accounted for (R^2) 12.4% of the variance in organizational commitment. The results of the regression are summarized in Table 15 and suggest that for every one unit increase transformational leadership, the organizational commitment will increase by .251 units.

Table 15

Linear Regression with Transformational Leadership predicting Organizational Commitment

Linear Regression with Transformational Leadership predicting Organizational Commitment					
	B	SE	β	*t*	*p*
Transformational	.251	0.075	.352	3.35	<.001

To examine hypothesis 1ₐ2, a Pearson *r* correlation was conducted to assess if there is a positive linear relationship between the transactional leadership practices and the organizational commitment level of subordinates. The result of the Pearson *r* correlation was significant, *r* (81) = .243, $p < .05$, suggesting that the null hypothesis was rejected and a positive linear relationship between transactional leadership style and organizational commitment level of 9-1-1 telecommunicators exists. The results for the correlation between transactional leadership practices and the organizational commitment level are summarized in Table 16. Figure 4 presents a scatter plot depicting a positive linear relationship between transactional leadership practice and organizational commitment.

Table 16.
Correlation between Transactional Leadership Practice and Organizational Commitment
N=81

Correlation between Transactional Leadership and Organizational Commitment

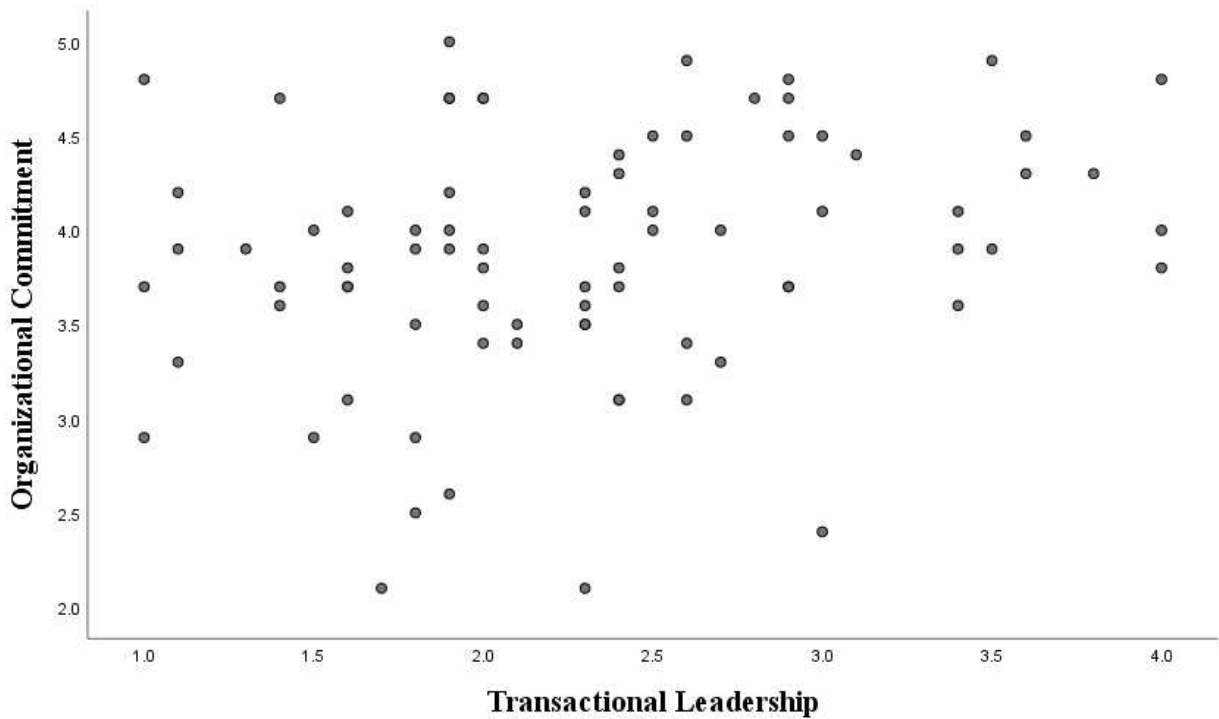| Transactional Leadership	Organizational Commitment
r	0.243**
Sig.	0.029
N	81

Note. **p < .05

Figure 4. Transactional Leadership predicting Organizational Commitment

To further examine hypothesis 1_a2, a linear regression was conducted to assess if there is a positive linear relationship between the transactional leadership practice and the organizational commitment level of 9-1-1 telecommunicators. The residual scatter plot is presented in Figure 5, and the assumptions of linearity met favorably; however, the assumption of homoscedasticity

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was not met. When linearity is violated, the scatterplot shape tends to be curved (C-shaped or U-shaped); when met, the scatter plot is rectangular. When homoscedasticity is violated, the scatter plot fans-out toward one end. The spread may be several times higher for values at one end of the scatter plot compared to those at the other end. Violations of linearity and homoscedasticity weaken the analysis (Tabachnick & Fidell, 2007).
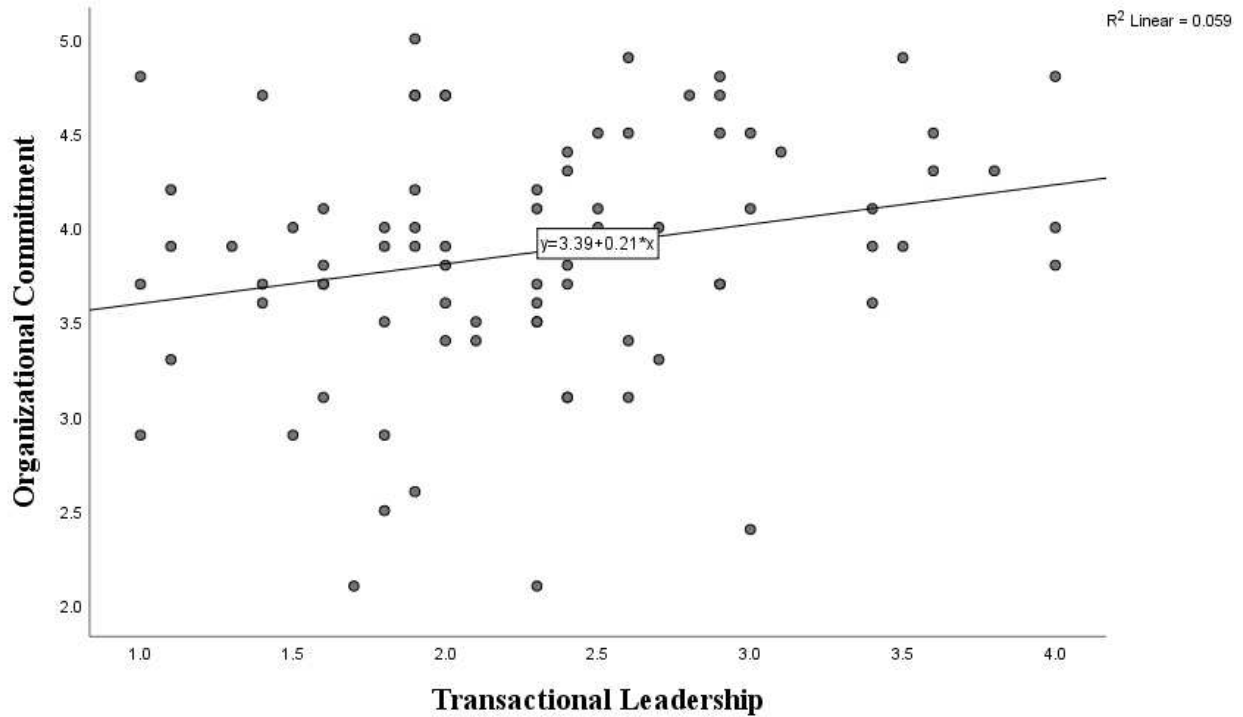
Figure 5. Transactional Leadership predicting Organizational Commitment

The results of the regression were significant, $F (1, 81) = 4.95$, $p < .029$, suggesting that the null hypothesis was rejected. Transactional leadership accounted for (R^2) 5.9% of the variance in organizational commitment. The results of the regression are summarized in Table 17 and suggest that for every one unit increase transactional leadership, the organizational commitment will increase by .21 units.

Table 17

Linear Regression with Transactional Leadership predicting Organizational Commitment

	B	SE	β	t	p
Transactional	.210	0.094	.243	2.23	0.029

To examine hypothesis 1_a3, a Pearson r correlation was conducted to assess if there is a negative linear relationship between the laissez-faire leadership style and the organizational commitment level of subordinates. The result of the Pearson r correlation was $r(81) = -.201$, $p = .072$. In general, there is a negative linear relationship between laissez-faire leadership style and organizational commitment of 9-1-1 telecommunicators; however, it is not statistically significant. The results suggest that the null hypothesis was not accepted. The results for the correlation between laissez-faire leadership style and the organizational commitment level are summarized in Table 18. Figure 6 presents a scatter plot depicting a negative linear relationship between laissez-faire leadership practice and the organizational commitment of 9-1-1 telecommunicators.

Table 18.
Correlation between Laissez-Faire Leadership and Organizational Commitment
N=81

Correlation between Laissez-Faire Leadership and Organizational Commitment

Laissez-Faire Leadership		Organizational Commitment
	r	-0.201
	Sig.	0.072
	N	81
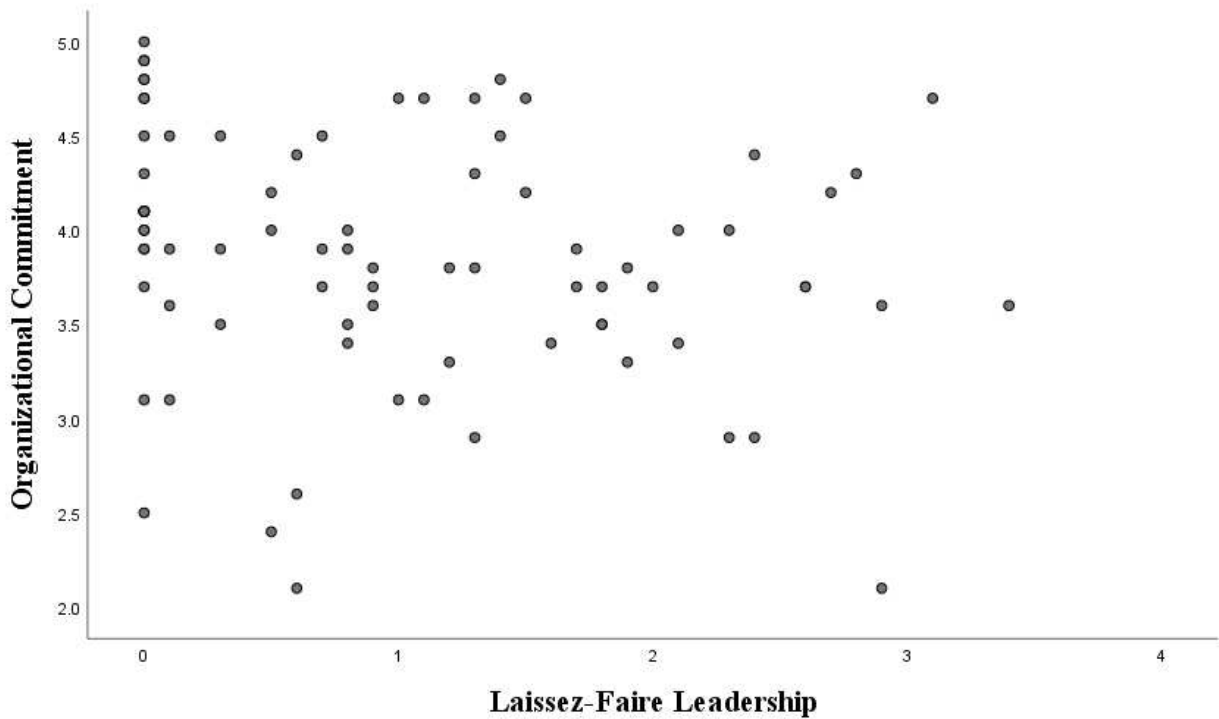
Figure 6. Laissez-Faire Leadership Style and Organizational Commitment

  To further examine hypothesis 1$_a$3, a linear regression was conducted to assess if there is

a negative linear relationship between the laissez-faire leadership practice and the organizational

commitment level of 9-1-1 telecommunicators. The residual scatter plot is presented in Figure 6,

and the assumptions of linearity met favorably; however, the assumption of homoscedasticity

was not met. Again, violations of linearity and homoscedasticity weaken the analysis

(Tabachnick & Fidell, 2007). The regression analysis for the hypotheses suggests that the linear

relationships are more indictors than strong predictors.
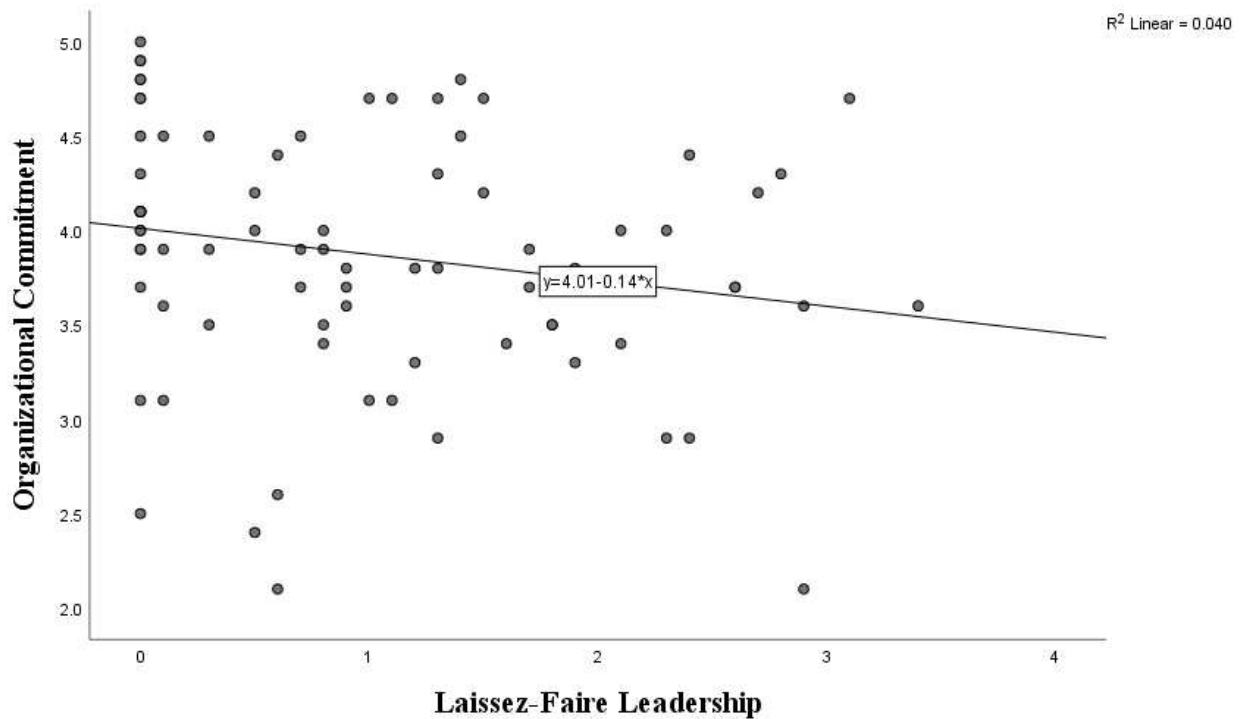
Figure 7. Laissez-faire Leadership predicting Organizational Commitment

The results of the regression were not significant, $F (1, 81) = 3.32$, $p = 0.072$, suggesting

that the null hypothesis was not accepted. Laissez-faire leadership accounted for (R^2) 4.0% of the

variance in organizational commitment. The results of the regression are summarized in Table 19

and suggest that for every one unit increase laissez-faire leadership, the organizational

commitment will decrease by -.138 units.

Table 19.
Linear Regression with Laissez-Faire Leadership predicting Organizational Commitment

	B	SE	β	*t*	*p*
Linear Regression with Laissez-Faire Leadership predicting Organizational Commitment					
Laissez-Faire	-.138	0.075	-0.201	-1.83	0.072

G. Answers to Research Questions

This study was designed to address the following five questions related to perceived leadership practices and the relationship of organizational commitment:

1. What is the personal and professional profile of individuals serving as 9-1-1 telecommunicators in northern Florida?

    The respondents were asked to provide their gender, age, tenure at the PSAP, and marital status. The sample population was comprised of 19 (23.5%) males and 62 (76.5%) females. The age of the 9-1-1 telecommunicator was skewed to older: 8 (9.9%) were 18-24, 28 (34.5%) were 25-34, 45 (55.6%) were 34 and over. Tenure skewed to the ten or less years: 30 (37%) were less than four years of employment, 19 (23.5%) were greater than four years but less than ten years, 15 (18.5%) were greater than ten years but less than twenty years, and 17 (21%) greater than 20 years. The question of marriage showed that the majority were not married: 47 (58%) not married, and 34 (42%) married.

2. What is the organizational commitment perception of 9-1-1 telecommunicators in northern Florida?

Organizational commitment was evaluated using the OCQ (15 questions). The 9-1-1 telecommunicators were instructed to read the statements in the questionnaire and then select one of the choices on a 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neither disagree nor agree, 4 = agree, 5 = strongly agree) that most accurately described their position about the statement. The results produced an organizational commitment mean distributed between 4.5 and 3.2, with an average mean of 3.9. Scoring showed the 9-1-1 telecommunicators' propensity of agreeing with their organizations' mission and direction.

3. What are the perceptions of 9-1-1 telecommunicators of their direct supervisors' leadership practices?

Leadership style was evaluated using the MLQ (5X-Short) (45 questions). The 9-1-1 telecommunicators were instructed to read the questionnaire statements and then select one of the choices on a 5-point Likert scale (0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently if not always) which most accurately described their position about the statement. The results produced leadership practice means distributed as 2.6 (transformational), 2.3 (transactional), and 1.0 (laissez-faire). Scoring showed the 9-1-1 telecommunicators perceived their leadership as primarily practicing transformational leadership, followed by transactional leadership, the then laissez-faire leadership.

4. To what extent is there a correlation between 9-1-1 telecommunicators' organizational commitment classification and their perceptions of their direct supervisors' leadership practice?

Quantitative analysis was used to answer the fourth research question for this study. The Pearson product-moment correlation coefficient calculated the strength and direction of the relationship between a PSAP administrator's leadership and the 9-1-1 telecommunicator's organizational commitment. Values of the correlation coefficients (r) range from -1.00 to 0 to +1.00, with values of zero (0.0) indicative of no correlation, values of +.10 indicative of a weak correlation, values of +.30 indicative of a moderate correlation, values of +.50 indicative of strong correlations, and values of +1.00 indicative of a perfect correlation (Cohen, 1992). All three leadership practices showed a correlation with organizational commitment. Transformational leadership had a correlation score of .352. The score shows a moderate positive correlation between transformational leadership and organizational commitment. Transactional leadership had a correlation score of .243. The score shows a positive (between weak and moderate) correlation between transactional leadership and organizational commitment. Laissez-faire leadership had a correlation score of -.201. The score shows a negative (between weak and moderate) correlation between laissez-faire leadership and organizational commitment.

5. What are the professional development training needs of 9-1-1 telecommunicators in northern Florida?

The 9-1-1 telecommunicators suggested a variety of desired professional development needs. First, leadership and professional development training were suggested by many. This training would be for both the leadership and for the 9-1-1 telecommunicator. Part of this suggestion encompassed developing relationships and

best practices through interagency and intra-agency working groups and shared events (e.g., ride alongs, county/city planning meetings).

Second, continuing training on upgraded software and hardware within the PSAPs was cited by many. Along with the technical training, ensuring the right personnel are teaching the subjects. The choice of the communication training officer (CTO) was just as crucial for successful learning.

Third, increased professional development pertaining to crisis intervention and wellness. There is a need for continued training on mass casualty events (e.g., terrorism, riots, hurricanes, tornados). The training would include how to mine the required databases for guidance and how to execute the required responses effectively. Wellness professional development for the 9-1-1 telecommunicator needs to be improved and continuous. Many of the 9-1-1 telecommunicators do not feel they have the proper tools to cope with the stressors this profession encounters adequately. Educating the 9-1-1 telecommunicators on good stress relief and compartmentalization will increase resiliency (and organizational commitment) and their overall well-being.

H. Chapter Summary

Chapter 4 began a restatement of the research study's purpose and summary of participation between leaders and 9-1-1 telecommunicators. An explanation of the research questions and hypotheses were discussed. The research process and a brief description of the survey instrumentation were reviewed. Following the demographic analysis, a descriptive analysis was performed using SPSS (V26). This analysis evaluated the central tendencies and variability of the data from the demographic questionnaire and both the OCQ and MLQ surveys.

Lastly, an inferential analysis was performed using Pearson's Product Moment Correlation and linear regression analysis to evaluate the four statistical hypotheses for this research study. All analyses performed used SPSS (V26) with a 95% level of significance.

The relationship between leadership and organizational commitment was generally significant within PSAPs except for laissez-faire leadership and organizational commitment. The regression analysis results supported the composite relationship between the dependent variable of organizational commitment and independent variables of transformational leadership, transactional leadership, and laissez-faire leadership. Pearson's Product Moment Correlation Coefficient and linear regression results led to the rejection of the four null hypotheses.

Chapter 5 discusses the research with a brief discussion of the data analysis and findings. Implications from the findings addressed concerns of 9-1-1- telecommunicators and leadership within a PSAP. The chapter closes with recommendations for leadership training, conclusions, and considerations for future research.

Chapter 5. Discussions, Implications, and Recommendations

The Public Safety Answer Point (PSAP) is an agency in which the employees and their leadership rely on each other for support more than most professions. Due to the aspects of their job, organizational commitment is instrumental in allowing that support to happen. 9-1-1 telecommunicators have a unique job compared to many other professions. Employees in PSAP's have to deal with regular stressors of a job, including; work relationships with supervisors and co-workers, lack of career development, workplace conditions or concerns, and work-life balance, to name a few. PSAP employees also have to deal with unique stressors, including life and death situations, lack of updated equipment, burnout, compassion fatigue, and post-traumatic stress disorder. 9-1-1 telecommunicators experience a greater share of customer exchanges than most professions. As such, 9-1-1 telecommunicators' organizational commitment is a direct reflection of the agency's performance and commitment to its customers.

The current study's design is to determine if a relationship exists between the perceived leadership practices of PSAP administrators and the organizational commitment level of 9-1-1 telecommunicators. The theoretical framework that guided this research study is the concept of the Full Range of Leadership Theory (FRLT) first developed by Burns (1978), expanded on by Bass (1985) and improved by Bass and Avolio (1994). The framework includes a comparison of the transformational leadership practice, transactional leadership practice, and laissez-faire leadership practice and how these particular practices relate to organizational commitment levels of 9-1-1 telecommunicators in PSAPs.

It has been asserted by Bass (1985) that effective leaders will employ either transactional or transformational leadership styles (Matikainen, 2019). Transformational leadership is known to inspire followers to a higher level of performance (Kellish, 2014).

Transformational leadership leads both leader and follower to higher ground through idealized influence (charisma), intellectual stimulation, individualized consideration, and inspirational motivation. Transactional leaders engage in an exchange between leader and follower, where the leader clarifies role expectations and provides rewards or consequences based on whether expectations are met (Bass, 1985).

The conceptual framework which guided the study was based on the relationship between perceived leadership practices and organizational commitment. While many studies in both the public and private sector have examined these key areas (Albrecht, 2005; Bučiūnienė & Škudienė, 2008; Currie & Lockett, 2007; Dale & Fox, 2008; Ellickson & Logsdon, 2002; Erez, Johnson, Misangyi, et al., 2008), very few studies have sought to determine if such a relationship exists in PSAPs. This study intended to determine if a relationship exists between a PSAP administrator's perceived leadership practice and organizational commitment of 9-1-1 telecommunicators.

The quantitative study used survey tools to answer the research questions. A demographic questionnaire gathered information about the participant to determine age, gender, tenure, marital status, as well as future professional development desires. Mowday, Steers, and Porter's (1979) Organizational Commitment Questionnaire (OCQ) measured the self-reported organizational commitment levels of the respondents. Bass and Avolio's (2004) Multifactor Leadership Questionnaire (MLQ-5X Short) measured the perceived leadership practices of PSAP administrators to determine if the leadership practice was transformational, transactional, or laissez-faire.

The target population was 9-1-1 telecommunicators in northern Florida. 294 9-1-1 telecommunicators received an email asking them to participate in the study. This email also explained the purpose of the study and why they were selected to participate. 81 9-1-1 telecommunicators accepted the invitation and completed the study. The respondents could

access the study after reviewing the informed consent page and agreeing to participate. The study began on March 16th, 2020, and closed on April 19th, 2020.

The responses were statistically analyzed to answer the primary research question "Is there a relationship between the perceived leadership practices (transformational, transactional, laissez-faire) of PSAP administrators and the organizational commitment of 9-1-1 telecommunicators.

Descriptive statistics were used to describe demographic data. Mean and standard deviations of the variables were calculated on the interval and ratio variables. To examine the research question, Pearson r correlations were conducted to assess if linear relationships exist between the perceived leadership practices of PSAP administrators and the organizational commitment level of 9-1-1 telecommunicators.

As this study focused on leadership practices in PSAPs, its findings beyond those agencies may not be applicable. The response rate of nearly 32% indicated that the 9-1-1 telecommunicators understood the survey questions. The results offered strong perceptions of how 9-1-1 telecommunicators viewed their administrators, indicating to what degree different leadership practices contributed to their organizational commitment. The research study addressed four hypotheses focusing on the relationship between leadership practices and behaviors and organizational commitment in a PSAP.

A. Study Results

The research question of the study asked whether a relationship exists between perceived leadership styles of PSAP administrators and the organizational commitment of the 9-1-1 telecommunicators. In addressing the research question, the findings of the study supported the alternative hypotheses that a linear relationship exists between transformational leadership

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practices and organizational commitment, a linear relationship exists between transactional leadership practices and organizational commitment, and a linear relationship exists between laissez-faire leadership and organizational commitment. The strongest positive linear relationship existed between transformational leadership and organizational commitment.

B. Strengths and Limitations

One of the strengths of the study was having access to a relatively large population of 9-1-1 telecommunicators. Though the pandemic of COVID 19 was happening, having the support of the PSAP administrators, the probability of a large number of participants was high. Having 81 9-1-1 telecommunicators complete the study from northern Florida provided a diverse population of 9-1-1 telecommunicators, representing many different areas in the emergency dispatch service.

An additional strength of the study was the convenience factor for the participants. The three surveys (demographic questionnaire, OCQ, and MLQ) were put into a web-based format with a point and click interface. Each 9-1-1 telecommunicator received an invitation to participate in the study. The invitation included a link to the informed consent document and then the survey web page. The entire process was estimated to take no more than 15 minutes.

The study also provided the strength of anonymity for the respondents. When requesting participants to fill out a survey in which they rate the leadership behaviors of their direct supervisors, they may be reluctant to be completely honest in their answers if their answers are tied to their identity. No personally identifiable information was gathered, and the website provided a secure environment, protecting the identity of the participants and their information. This element provided an additional level of comfort for participants to facilitate more open and honest answers in the survey process. One unique factor of the demographic survey was that it

contained one open-ended question in which the 9-1-1 telecommunicator could answer to help determine future training requirements for professional development.

A limitation of the study is the cross-sectional nature of the data in which causality cannot be assumed. An experimental or longitudinal study design would be necessary to justify causal inferences. This type of study design would also help identify and possibly predict cycles of organizational commitment relevant to other variables besides leadership style. For example, levels of commitment may change during mandatory overtime, natural disasters, promotional processes, abnormally rough phone calls, policy changes, and an administrator change.

C. Conclusions

Discussion and Implications

The purpose of the research study examined the relationship between different leadership styles and organizational commitment within northern Florida PSAPs. After collecting data from two different survey instruments, multiple statistical methods were employed to evaluate the resulting data. Conclusions relevant to the hypotheses were presented separately in the following sections. Hypothesis 1_o evaluated the likelihood that different leadership styles would predict employee organizational commitment. Hypotheses 1_a1 through 1_a3 evaluated the relationship between transformational leadership, transactional leadership, and laissez-faire leadership, respectively, and organizational commitment.

Hypothesis 1_o. The results for this hypothesis indicated that at least one leadership element was significant when predicting organizational commitment. A statistically significant relationship was found among transformational leadership, transactional leadership, and organizational commitment. Therefore, the Null Hypothesis 1_o is rejected. These combined results closely validated the findings from Hypothesis 1_a1 and 1_a2. Further, the weaker result from transactional

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leadership in this hypothesis and Hypothesis 1$_a$2 validated the existence of a weaker relationship of transactional leadership when predicting organizational commitment.

Hypothesis 1$_a$1. The results pertaining to this hypothesis indicated that transformational leadership has a relationship with organizational commitment. The statistically significant relationship suggested that organizational commitment increases when leaders mirror a transformational leadership practice and behavior. Lower scores reflect a leader who lacks the inspiration and motivation to lead others; higher scores reflect an engaged leader who exudes confidence and power through coaching and mentoring. The results indicated an organizational culture within PSAPs, where leaders and followers engage directly and indirectly toward effectiveness. Bass and Avolio (1994) concluded that the actions and behaviors of transformational leadership influence followers. The study shows the 9-1-1 telecommunicator's perception of their leaders supported this influence, as evidenced by both an *r*-value of 0.352 and a mean score of 2.6 (between *sometimes* and *fairly often*), skewed toward *fairly often*. Therefore, the Null Hypothesis 1$_a$1 is rejected.

Hypothesis 1$_a$2. The results for this hypothesis suggested a statistically significant relationship between transactional leadership and organizational commitment. The relationship between these two variables pointed to a weak to moderate influence. Lower scores indicated a leader who lacks guidance, while higher scores suggest a very structured leader who focuses on performance goals and expectations. The results indicated that 9-1-1 telecommunicators are acting on their own with minimal direction from leaders. Not to be confused with delegation or empowerment, transactional leaders tended to exude a personal agenda centered on their own goals. The instrument did not explicitly distinguish between the different elements within the transactional questions, leaving the interpretation open for further examination. The study shows the 9-1-1

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telecommunicator's perception of their leaders supported this influence, as evidenced by both an *r*-value of 0.243 and a mean score of 2.3 (between *sometimes* and *fairly often*), skewed toward *sometimes*. Therefore, the Null Hypothesis 1$_a$2 is rejected.

Hypothesis 1$_a$3. The results of this hypothesis did not suggest a statistically significant indirect relationship between laissez-faire practice and organizational commitment. Lower scores indicated an engaged leader, while higher scores indicated a leader who waits for things to fail before getting involved. The inverse relationship between these variables pointed to a higher commitment from leaders empowering employees to perform their job. However, once things went wrong, and leaders reacted negatively, employees' organizational commitment weakened as a direct result of absent leadership. The study results supported a leadership approach where leaders are not actively engaged with followers unless they are forced to intervene. The indirect result ($r = -0.201$) illustrated that followers do not require PSAP leadership assistance, mirroring an empowered approach to managing the program and activities. The low mean ($M = 1.0$) also supported the active engagement between leader and follower. Therefore, the Null Hypothesis 1$_a$3 is not accepted.

The results supported a situational approach to leadership where the application of full-range leadership elements vary depending on the circumstances. However, these results illustrated that transformational leadership and laissez-faire leadership play a more prominent role in organizational commitment than transactional leadership. These tendencies did not necessarily diminish the role or importance of transactional leadership behaviors, like defining expectations or administering corrective actions. The comprehensive execution of full-range leadership yielded both direct and indirect levels of organizational commitment.

The results indicate that 9-1-1 telecommunicators have higher organizational commitment levels when their administrators exhibit transformational leadership behaviors. The study was not able to determine if the transformational leadership style causes a higher organizational commitment, but it does establish a linear relationship between the two. The study also reveals that followers who are subjected to the laissez-faire leadership behaviors tend to have lower levels of commitment, emphasizing the importance of leadership practices in the PSAPs. Leadership is a critical element to the future success of the PSAPs. Leadership training needs to be addressed as part of the strategic planning process.

Some researchers have suggested public sector employees will have higher levels of commitment to their jobs and their organizations due to intrinsic values and role functions (Cadwell, Chatman, & O'Reilly, 1990; Lee & Olshfski, 2002; Thompson & Bono, 1993; Young, Worchel, & Woehr, 1998). Keeping organizational commitment levels in 9-1-1 telecommunicators high is an essential aspect of organizational success. Organizational commitment is a critical factor in the possible prediction of organizational outcomes like improved organizational performance, increased knowledge sharing, decreased turnover, higher levels of organizational effectiveness, increased organizational citizenship behaviors, and lower absenteeism (Alvesson, 2001; Angle & Perry, 1981; Cogliser, Schriesheim, Scandura, et al., 2009; Colbert, Kristof-Brown, Bradley, et al., 2008; Dale & Fox, 2008; Laschinger, 2001; Eby, Freeman, Rush, et al., 1999; Mathieu & Zajac, 1990; Meyer & Allen, 1997; Mowday, Porter, & Steers, 1982; Randal, 1987; Steers, 1977). Lower levels of commitment have been linked to higher stress-related issues (Ward & Davis, 1995). Business Insider (2013) surveyed almost 750 different professions and created the 2013 jobs rated report, which lists the most stressful jobs. The job of 9-1-1 telecommunicators listed in the top ten of the most stressful jobs. The report

pointed out that 9-1-1 telecommunicators often work irregular hours due to mandatory overtime and manage life and death calls as well as having typical office conflicts. Working toward higher levels of organizational commitment can help address some of the stress-related issues associated with lower levels of commitment.

There have been a variety of studies that show increased organizational commitment as one of the positive effects of transformational leadership (Barling, Weber & Kelloway, 1996; Bycio, Hackett, & Allen, 1995; Emery & Barker, 2007). PSAP administrators who engage in transformational leadership training within a PSAP can produce a beneficial approach to raising organizational commitment levels.

9-1-1 telecommunicators need transformational leaders who inspire them to perform beyond their normal expectations, challenge them intellectually and set the role model example of leadership the 9-1-1 telecommunicators require. The results of this study should encourage PSAPs to pursue learning and development in the area of transformational leadership.

As this study shows, laissez-faire leadership can contribute to lower organizational commitment levels. Supervisors who fall into this category fail to develop their followers or get involved in issues until they become dire (Bass & Riggio, 2006).

D. Summary of Conclusions

The results of this study align with the results of other studies, showing a positive linear relationship between transformational leadership and organizational commitment (Albrecht, 2005; Barling, Weber & Kelloway, 1996; Bycio, Hackett, & Allen, 1995; Dvir, Eden, Avolio, et al., 2002; Emery & Barker, 2007; Lowe, 2000; Pillai & Williams, 2004). Data from this study shows PSAPs should take inventory of the leadership practices which are employed within their chain of command. Laissez-faire leadership shows a linear relationship to lower organizational

commitment levels. Agencies whose administrators practice transactional leadership shows a linear relationship to higher commitment levels than laissez-faire. Transformational leadership shows the strongest linear relationship to a higher commitment level. The study shows that integrating transformational leadership into PSAPs can contribute to higher levels of organizational commitment.

E. Recommendations

The emergency medical dispatch community has been a neglected sector when it comes to studies on the topics of leadership practices and organizational commitment. From the results, a primary recommendation for PSAP leadership would require training all leaders in the elements of transformational leadership practices. Working with national groups (e.g., NENA, IAED), develop a leadership class that incorporates the five elements of transformational leadership. This curriculum should also include ideas that foster coaching and mentoring of subordinates. Leadership needs to keep in mind; not all 9-1-1 telecommunicators aspire to be PSAP administrators, a program devoted to leading from the middle or upper-middle would enhance the skills and abilities of these critical managers. Last, a progressive leadership training program would allow managers to merge book knowledge and practical application, essentially honing their leadership style to influence the mission execution across PSAPs.

In addition to personal and professional leadership development, enhanced leadership skills positively influence organizational commitment. Creating a cooperative work environment that builds on the leader-follower relationship offers a constructive method to influencing commitment levels and, ultimately, organizational performance. The individual qualities of transformational leadership encourage building awareness of team performance (Bass & Avolio, 2004) and active participation across all organizational relationships (Zinni & Koltz, 2009).

The natural sequence for leadership training requires leaders to implement the learned attributes and behaviors. This inclusive approach to leadership development requires leaders first to learn about leadership and self-analyze their style and behaviors. An employee assessment of the leader, similar to either a 360-degree assessment or the Rater form of the Multifactor Leadership Questionnaire, offers an upward look at leadership. Leaders can more effectively match the organization's goals and expectations against their skills and abilities identified from the leader assessments. Once identified, the leader can cross-reference the three leadership elements – self-analysis, other analysis, and organizational goals – to integrate the findings into a leadership application plan.

An equally important but often forgotten phase of leadership development involves growth and succession. The findings from the study provide an awareness of the importance of leadership and organizational commitment. As an essential component of organizational performance in PSAPs, effective leadership plays a substantial role in predicting organizational commitment. Thus, the relationship between leaders and employees must be nurtured and emphasized to strengthen organizational commitment and performance effectiveness.

In addition to the above recommendations, the 9-1-1 telecommunicators also brought other ideas that would help their organizations by answering the open-ended question on the demographic questionnaire. First, there should be more intra-agency, and interagency training should happen. This training is not only with leadership but also with the 9-1-1 telecommunicators. The intra-agency training would include more training with the police, fire, and rescue units that they serve. The training could be done by facilitating ride alongs or bringing those agencies into the PSAP for discussions for a better relationship and understanding how each affects the other.

Interagency training would include the PSAP leadership attending meetings with city and county leadership to get a better understanding of the ever-changing needs of the population they serve. The PSAP leadership could bring this back to the PSAP and advise the 9-1-1 telecommunicators. Interagency cooperation with other PSAPs would be a great benefit to all agencies within the state. 9-1-1 telecommunicators could train with other agency 9-1-1 telecommunicators and obtain an understanding of their best practices. The information learned could be shared with the 9-1-1 leadership for implementation. This training will also foster better professional relationships within the emergency medical dispatch field. Having working groups amongst PSAPs would also allow the information to flow between agencies.

Second, the PSAP leadership needs to ensure that the person/people fulfilling the Communications Training Officer (CTO) position within the PSAP is the right person for the job. Many times the person with the most knowledge or who is most senior (or just volunteers) will be put into positions like these. Just because someone is knowledgeable does not mean they can teach the information effectively. PSAP leadership must not only ensure the right people are teaching the classes, but they must also ensure that the classes and materials used are up to date. Technology is changing, and the PSAPs have to look ahead and ensure they are providing the most current data. The training provided within the PSAPs should include mass casualty events (MCEs), active shooter scenarios, and more natural disaster (hurricane, tornados) preparedness, to name a few. Training should also include database mining for agencies like the National Incident Management System (NIMS) and the Federal Emergency Management Agency (FEMA) to help with disaster scenario planning and complicated logistical plans.

Third, if an agency is dual (Fire/Rescue, Fire/Police or Police/Rescue) or triple-accredited (Fire/Rescue/Police), ensure that there is a training program in place that will allow all 9-1-1

telecommunicators to certify on each aspect of the PSAP. By learning and qualifying with the separate protocols (Fire/Rescue/Police), the flexibility and service provided would increase for the 9-1-1 telecommunicators, the leadership, and the public.

Fourth, the demographic question asking a person's age shows the majority of 9-1-1 telecommunicators in northern Florida identified themselves as being in the older age groups (24 years of age and older – 90.1%). The CTOs and the PSAP administrators need to take into account the majority of 9-1-1 telecommunicators are adult learners, and they need to be taught as such. I would recommend the CTOs and PSAP administrators be required to take classes in the art or science of teaching adults (andragogy). Understanding adult learners will allow the curriculums to be received appropriately and provide for a better learning environment.

Finally, training for the 9-1-1 telecommunicators needs to focus on mental wellness. The study has shown that this can be a tough profession. It is sometimes challenging to compartmentalize a disturbing call and be prepared for the next one. The effects of PTSD are beginning to show in this profession. With more access to the 9-1-1 number (landlines and cell phones), more anxiety-filled calls continue to come into the PSAP. Resiliency techniques for 9-1-1 telecommunicators need to be incorporated into training curriculums. The 9-1-1 telecommunicators need training on how to relax without alcohol, find healthy stress relief, and engage in stress management with a focus on long term self-care.

F. Recommendations for Future Research

The results of this research study indicated a relationship between leadership and organizational commitment in northern Florida PSAPs. Since this study may not be generalized to the population as a whole due to limiting the participants to 9-1-1 telecommunicators in northern Florida, the initial recommendation would require replication of the current study using

a larger sample of PSAPs around the state and the country. A larger sample that included other parts of the state of Florida and across the country would provide further support for refined leadership training. Expanding the study population to all PSAPs would create a statistically valid population of 9-1-1 telecommunicators. This potential comparison could further lead to refining what leadership training and education would best benefit both PSAP leadership and the 9-1-1 telecommunicators. With additional PSAPs, a future study could consider the difference in leadership practices between civilian and sworn officer PSAP administrators.

The research study did not investigate the demographics of employees concerning their perception of leadership style. The second recommendation involves using a larger sample of 9-1-1 telecommunicators to determine if age, tenure, gender, or marital status would predict organizational commitment. The diverse workforce around the country could provide some unique perspectives of their leaders' style and effectiveness as it pertains to organizational commitment.

A third recommendation would be to conduct a study on the required personality traits and interests required to be successful in this profession. Traits and interests such as aptitude, empathy, ability to multitask, communication skills, decision-making skills, and listening skills, to name a few, could be tested. A personality test could be given to 9-1-1 telecommunicators who have tenure over ten years on the job. In order to remain on the job for that long, most of them will have mastered the required traits and interests required to be successful. With their help, a study could help get a better picture of a viable candidate for the PSAPs. A better candidate will help with the attrition of new hires and will reduce turnover in the future.

A final recommendation involves comparing PSAP leadership practices and 9-1-1 telecommunicators' organizational commitment by state or region to examine leadership styles in

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different parts of the country. PSAPs in different parts of the country theoretically have different socioeconomic and cultural differences, as well as natural disasters and manmade disasters. Even though the overall mission remains the same, support requirements could be vastly different. Additionally, future research would assist in addressing some of the limitations of this study. Additional studies could also involve a mixed-method where qualitative interviews would help identify specific leadership styles and behaviors (Creswell, 2008).

While this research provides the most extensive known study to date in the emergency medical dispatch on the topic of leadership and organizational commitment, future studies would help in adding to the body of knowledge and creating a deeper understanding of leadership in this vital sector. Adding more interview questions to the survey process or more in-depth open-ended questions on the survey tool would be a recommendation. Additionally, a longitudinal study utilizing structural equation modeling would provide the ability to infer directions of causality where this study is unable.

Expanding the variables in the study to include other factors that may be related to organizational commitment would provide additional insight for the PSAPs as well. Future research might also focus on determining whether other variables are related to or interact with perceptions of leadership style like trust and organizational politics.

G. Chapter Summary

In conclusion, further research is necessary to determine if transformational leadership styles can cause higher commitment levels in 9-1-1 telecommunicators. Longitudinal studies are needed to compensate for the cross-sectional design of this particular study. This study provides a strong foundation for exploring leadership and organizational commitment within the PSAPs.

The expectation to provide quality service reflects on the leadership styles and behaviors these leaders exhibit. Employees who deliver excellent service hold the key to customer satisfaction as well as their organizational commitment, which further reflects their leaders' styles and behaviors.

The present study demonstrated a direct relationship between organizational commitment and leadership. Even though the connection between employee and leader interaction did not translate into effective organizational performance across all PSAP agencies, the implementation of full-range leadership contributed to effective leadership in different situations. However, transformational leadership was a better predictor of organizational commitment than transactional leadership and laissez-faire leadership (Bass, 1997).

Leaders who institute a full-range leadership style imparted positive influence over employees in any industry (Bass & Avolio, 2004). However, leaders must remain cognizant that different situations require different leadership styles (Hersey, Blanchard, & Johnson, 2008). A leadership toolkit that encompasses various leadership practices and components offers the best opportunity for leaders to integrate behaviors into operations, leveraging relationships with followers, and working toward organizational effectiveness. After all, every person in a leadership position wants an employee that is committed to the organization.

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Appendices

Appendix 1

Red River Regional Dispatch Center

A. Requirements

Being a telecommunications operator can be a very rewarding and fulfilling profession. It requires a variety of knowledge, skills, and abilities, both physical and mental. A dispatcher must be able to make decisions and act on them with limited time and information in situations where there is an element of danger. He or she must be able to deal with people in a variety of emotional or mental states while remaining calm and professional. Rigorous entry standards are absolutely necessary to ensure that dispatchers are able to meet the physical and mental demands of the job.

Job Requirements:

- High school diploma or GED or an equivalent combination of education and experience sufficient to successfully perform the essential duties of the job
- Knowledge of computer operations sufficient to enter, retrieve and manipulate data
- Ability to read and follow oral and written instructions
- Net Keyboard/typing speed of 40 wpm or better(Gross minus errors = Net)
- Effectively prioritize situations and make decisions based on the information received
- Ability to hear and understand multiple sound sources
- Able to handle multiple tasks to receive and communicate information to and from several sources ensuring calls for service are dispatched and monitored in a timely manner
- Work under stressful conditions and react appropriately using good judgment
- Availability to work shifts, including nights, weekends and holidays
- Willingness to maintain respectful working relationships with co-workers, supervisors and the general public
- Possess a clear and understandable radio and telephone voice

Qualities of a good dispatcher include:

- High moral character and integrity
- Compassion

- Good judgment

- High degree of emotional self-control

- Empathy and sensitivity

- Intelligence

- Good communication skills

- Self-confidence

- Creativity and ingenuity

- Strong desire to serve the community

- Effective at multi-tasking

Special Requirements:

- Must be CPR, EMD, and NCIC certified. Certification must be attained within a reasonable amount of time upon appointment to the position

- Must pass a criminal background investigation to include a polygraph exam and be free of felony convictions

- Must pass the pre-employment screening test, including a psychological exam, hearing test, drug screening, and physical exam

Physical Demands:

- Ability to sit, talk and hear

- Ability to use hands and fingers to handle, feel or operate objects, tools or controls

- Ability to reach with hands and arms

- Ability to occasionally lift and/or move up to 25 pounds

- Vision abilities include close vision and ability to adjust focus

- Ability to function in a work environment with moderate noise level from several sources creating constant activity

Dispatchers perform the following duties:

- Answer 9-1-1 and non-emergency phone calls from the public and dispatch appropriate law enforcement, fire or EMS units

- Operate computerized telephone, radio and mapping systems

- Provide emergency medical instructions (EMD) over the phone

- Monitor and dispatch multiple agencies

- Maintain contact with caller throughout an emergency and update responding personnel of the changing situation

- Activate civil defense sirens and pagers for emergencies and inclement weather

- Attend special and periodical training programs on a continuing basis

- Maintain a thorough working knowledge of all other public safety communications systems used at the dispatch center and throughout the RRRDC, including:

- Console Call Repeaters

- Video Cameras

- Alarms and Warning Lights

- Siren, paging, and radio control back-up equipment

- Monitor and direct emergency and non-emergency dispatches utilizing call prioritization, all/incident location identification, and intra-departmental responses following RRRDC's policies to minimize potential dangers to the community and first responders.

RED RIVER REGIONAL DISPATCH CENTER

POSITION DESCRIPTION

POSITION TITLE: Communications Operator
ACCOUNTABLE TO: Communications Shift Supervisor

A. Primary Objective of Position

Under supervision, performs a variety of routine and complex public safety communication tasks for the Red River Regional Dispatch Center (RRRDC) which provides a public safety communications network to law enforcement, fire, EMS and other emergency responders within Moorhead/Clay County, MN, and Fargo/West Fargo/Cass County, ND.

B. Essential Functions and Responsibilities

Receive, screen and prioritize emergency 9-1-1, non-emergency, and TTY telephone calls for service requiring law enforcement, emergency medical services, or fire department attention. Monitor activities of or stays in contact with caller throughout an emergency, and provide pre-arrival medical instructions to the caller while waiting for units to arrive. Refers non-emergency calls to appropriate personnel.

Operate a multi-frequency radio system to monitor, direct and participate in emergency and non-emergency dispatching utilizing call prioritization, caller/incident location identification, and intra-departmental response following RRRDC's policies and procedures to minimize potential dangers to the community and first responders. Maintain status and location control of all public safety personnel involved in department activities.

Possess a thorough understanding to effectively enter calls for service information into the Computer Aided Dispatch (CAD) system accurately and rapidly. Must condense large amounts of information into readable, typed remarks in a timely manner and have the ability to recall numerous acronyms and codes essential to appropriate call processing. Possess the ability to process CAD system queries and identify alert information.

Acquire and maintain certification as a full access terminal/teletype operator for use with state or national crime reporting systems, to query and enter information (i.e., stolen vehicles, warrants, missing persons, state driver's records, vehicle registrations, and criminal history inquires) for the appropriate public safety agencies. Certification must be attained within six months of appointment to the position.

Possess a thorough understanding of the addressing and geography of Moorhead/Clay County and Fargo/West Fargo/Cass County. Possess the ability to interpret maps of the RRRDC and surrounding service area using computerized mapping software and map books. Possess an understanding and effectively use the Automatic Vehicle Locator (AVL) system to determine the location of units

Monitor and activate the RRRDC's procedures for civil emergencies, disasters (i.e., hazardous materials) and inclement weather via sirens, pagers, teletype, telephone, and radio. Monitor the situation and relay accurate information to the appropriate agencies in a timely manner.

Work rotating shift work, including evenings, nights, weekends, and holidays. Must be available to work extended shifts and be subject to emergency callouts.

Maintain familiarity with the Law Enforcement Call Guides, Fire/EMS Call Guides, Standard Operating Procedures, and the Red River Regional Employment Policy Manual and other appropriate manuals that provide a thorough knowledge of Red River Regional Dispatch Center operations and procedures.

Maintain a thorough working knowledge of all other public safety communications systems used at the dispatch console and throughout the RRRDC (including but not limited to the console call repeaters, video cameras, alarms, and warning lights, sirens, paging and radio control back-up equipment).

Deal with sensitive information discreetly and professionally by maintaining confidentiality.

Able to troubleshoot and resolve minor computer hardware and/or software malfunctions.

Responsible for the following miscellaneous duties;
   ❖ Monitor law enforcement building security and assist walk-in citizen traffic after normal business hours, weekends, and holidays by use of the Center's video cameras.
   ❖ Knowledgeable of all other available support agencies, services, and all other miscellaneous information as a contact resource to the public.

- ❖ Knowledgeable of mutual aid agreements and other miscellaneous department/agency information for dispatching fire and emergency responders in Moorhead/Clay County and Fargo/West Fargo/Cass County.
- ❖ Knowledgeable of all other records search databases available in RRRDC (including but not limited to public utility database, law enforcement records).
- ❖ Attends special and periodic training programs and meetings on a continuing basis as required by RRRDC management.
- ❖ Knowledge of the back-up dispatch location, set-up of equipment, and general operations.

Other Responsibilities
- ❖ Performs other duties and assumes additional responsibilities as assigned by the Director or Assistant Director. RRRDC reserves the right to update or change the job duties and responsibilities as needed.
- ❖ May be assigned to specific duties, including but not limited to, Communications Training Officer.

C. Qualification Requirements

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Minimum Qualifications
- ❖ High school diploma or its equivalent (G.E.D
- ❖ Ability to type 40 corrected words per minute.

Knowledge, Skills, and Abilities
- ❖ Ability to communicate effectively in the English language, both verbally and in written communication.
- ❖ Knowledge of computer software sufficient to enter, retrieve, and manipulate data.
- ❖ Ability to read and follow oral and written instructions.
- ❖ Ability to work under stressful conditions and react appropriately using good judgment.
- ❖ Possess a clear and understandable radio and telephone voice.
- ❖ Ability to effectively prioritize situations and make rapid, accurate decisions which affect the outcome of public safety services based on the information received
- ❖ Must have basic knowledge of computer hardware.
- ❖ Able to handle multiple tasks to receive and communicate information to and from several sources, ensuring calls for service are dispatched and monitored in a timely and accurate manner.
- ❖ Ability to hear and understand multiple sound sources
- ❖ Ability and willingness to maintain respectful working relationships with co-workers, supervisors, public safety agencies, and the general public
- ❖ Ability to work varying shifts, weekends, and holidays.
- ❖ Ability to be reliable and dependable and report for work as scheduled.

Special Requirements

❖ Must successfully complete the RRRDC Communications Operator Training program upon appointment to the position
❖ Must be CPR, EMD, and NCIC certified. Certification must be attained within a reasonable amount of time upon appointment to the position.
❖ Must pass a hearing test.
❖ Must pass a criminal background investigation and be free of a felony conviction.
❖ Must pass pre-employment screening tests, including psychological exam, polygraph exam, and drug screening.

D. Physical Demands

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this position.

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to sit for protracted periods of time, talk, and hear; use hands and fingers to feel or operate objects, tools, or controls; enter information on a keyboard, and reach with hands and arms.

The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision and the ability to adjust focus.
The employee must be able to think, reason, and analyze multiple issues for extended periods of time. The employee must be able to function in stressful situations.

The employee must work up to twelve (12) hours or longer at a time continuously wearing a communications headset that will cover one ear and be able to still hear and understand other outside sound sources not coming to the earpiece.

The employee must be prepared to stay in the Center for the full scheduled shift. Uninterrupted lunch and other breaks are not guaranteed.

E. Work Environment

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Noise in the work environment is at a moderate level and originates from several sources at once, creating constant activity.

The job description does not constitute an employment agreement between the employer and the employee and is subject to change by the employer as the needs of the employer and requirements of the job change.

Appendix 2

Survey Instrument: Organizational Commitment Questionnaire (OCQ)

Listed below are a series of statements that represent possible feelings that individuals

might have about the organization for which they work. With respect to your own feelings

about this company, please choose the response that best applies to each statement.

1	2	3	4	5
Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree

1. I am willing to put in a great deal of effort beyond that normally expected
in order to help this organization be successful.   1 2 3 4 5
2. I talk up this organization to my friends as a great organization to work for.   1 2 3 4 5
3. I feel very little loyalty to this organization.   (R) 1 2 3 4 5
4. I would accept almost any type of job assignment in order to keep
working for this organization.   1 2 3 4 5
5. I find that my values and the organization's values are very similar.   1 2 3 4 5
6. I am proud to tell others that I am part of this organization.   1 2 3 4 5
7. I could just as well be working for a different organization as long as
the type of work was similar.   (R) 1 2 3 4 5
8. This organization really inspires the very best in me in the way of job
performance.   1 2 3 4 5
9. It would take very little change in my present circumstances to cause
me to leave this organization.   (R) 1 2 3 4 5
10. I am extremely glad that I chose this organization to work for over the
others I was considering at the time I joined.   1 2 3 4 5
11. There's not too much to be gained by sticking with this organization
indefinitely.   (R) 1 2 3 4 5
12. Often, I find it difficult to agree with this organization's policies on
important matters relating to its employees.   (R) 1 2 3 4 5
13. I really care about the fate of this organization.   1 2 3 4 5
14. For me this is the best of all possible organizations for which to work.   1 2 3 4 5
15. Deciding to work for this organization was a definite mistake on my part.   (R) 1 2 3 4 5

Adapted from Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Permission
not required for use.

Appendix 3

1/10/2020
From: Andre Lanier <awlanie@uark. edu>
To: Andre ' Lanier <cwtsp3nfo1@aol.com>
Subject: Fw: OCQ Usage
Date: Thu. Jan 9. 2020 3:28 pm

From: Rick Mowday<rmowday@uoregon.edu>
Sent: Friday, November 15, 2019 7:06 PM

To: Andre Lanier <awlanie@emal.uark.edu> **Subject:** Re: OCQ Usage

Andre

The Organizational Commitment Questionnaire (OCQ) was originally developed by the late
Professor Lyman Porter. He decided not to copyright the instrument to encourage its use in
research by others. As a consequence, the OCQ legally exists in the public domain and it is
unnecessary to secure explicit permission for its use. Good luck completing the dissertation.

Rick Mowday

From: Andre Lanier <awlanie@email.uark.edu>
Sent: Friday, November
15, 2019 9:50 AM
To: Rick Mowday
Subject: OCQ Usage

Dr Mowday,
            Good Morning to you. It is already afternoon here on the East Coast. My name is
André Lanier. I am currently a grad student at the University of Arkansas. I am currently
working on my manuscript for my dissertation. I am wanting to use your Occupational
Commitment Questionnaire as part of my study.

My study is on "The Relationship between Leadership Practice and Organizational Commitment
of Telecommunicators." The telecommunicators are located within Emergency Call Centers
(also known as Public Service Answer Points).

I am requesting to use your OCQ as part of my study. My understanding is that the OCQ is
available as an open-source document. Can you please confirm this or direct me to what I need
to do in order to obtain permission to use.

If I am way off base with the belief it is open-sourced, please let me know. I will apologize in
advance if that is the case.

Thank You for your time,
Andre' Lanier

mind garden

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

Multifactor Leadership Questionnaire

The three sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Citation of the instrument must include the applicable copyright statement listed below. Sample Items:

As a leader ….

      I talk optimistically about the future. I spend time teaching and coaching. I avoid making decisions.

The person I am rating….

      Talks optimistically about the future. Spends time teaching and coaching. Avoids making decisions

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

Appendix 5

The fifth question of the demographic survey asked, "What are the professional development training needs of 9-1-1 telecommunicators in northern Florida?" Some of the responses were generic, and many were specific. The generic answers included statements like Leadership/more staff and better training/more call training/real-world scenarios/need new chairs/our agency is doing a good job on training. The answers of the 9-1-1 telecommunicators that answered more specifically fell into one of three categories: Leadership and Professional Development, Technological Management and Training, and Crisis Intervention Training and Wellness.

Leadership and Professional Development. Many of the 9-1-1 telecommunicators expressed a desire to have continuing leadership training. This training would not only for themselves but for all members of the PSAP. Supervisor courses should include people skill training, knowing how to engage, handle conflict, and de-escalate situations. Leaders should be involved in continual professional development (meeting with city/county leadership) to continue to meet the ever-changing needs of the population they serve. Desired courses of instruction for both leadership and 9-1-1 telecommunicators included professional expectations and ethics, effective interpersonal relationship and communication skills, team-building exercises, learning how to multi-task, determine priorities, and gaining a better understanding of police, fire, and rescue organizations.

Several suggestions alluded to ensuring the right people held the position of the Communication Training Officer (CTO. The discussion was ensuring that the CTO's had the right experience and the teaching/mentoring abilities to help the new 9-1-1 telecommunicators continue to progress. Leadership needs to encourage all 9-1-1 telecommunicators to train to other

positions within a call center. 9-1-1 telecommunicators require continual training and certification in call handling, emergency medical dispatching, fire protocols dispatching, police protocols dispatching, and knowledge of the geographical area. Another suggestion was to create task groups to help with ideas that affect the day to day operation of the PSAPs. An idea mentioned several times was for PSAPs in the state of Florida to train with each other to learn best practices. This type of training would include being able to ride along with different agencies (police, fire, and rescue) to learn their areas of responsibility in order to supply a better product and improve relationships.

Technological Management and Training. This profession is continuously changing technologically. Many of the 9-1-1 telecommunicators expressed opinions on this subject. Training on the future capabilities of emergency medical dispatch was a topic brought up by several 9-1-1 telecommunicators. Training on Next Generation 9-1-1(the federal 9-1-1 program), FirstNet (nationwide broadband network for 9-1-1), and being able to analyze benchmarking and data within the PSAP.

Further training is required, not just on the job training (OJT) on various computer and communication equipment. The 9-1-1 telecommunicators use a computer-aided dispatch (CAD) system to locate callers and track emergency response vehicles. This technology and associated platforms are updated with new versions often, and the training is sometimes lacking or not provided. In-person classes with hands-on training were thought to be a better use of training time by several respondents. Training on this equipment will help the 9-1-1 telecommunicator to quickly determine jurisdictional boundaries based on the address provided by the caller. Training to maximize the capabilities fully will allow the 9-1-1 telecommunicator to obtain pertinent, accurate, factual information (location, safety issues, weapons present), jurisdiction, and decide

what type of emergency incident the citizen is reporting, and complete the call for service within 2 minutes after answering the 9-1-1 call. Leadership needs to ensure that current testing is relevant and concise within the courses. Cross-training and learning should take place in all centers. This cross-training is especially essential if the PSAP is dual or triple certified. Providing this training allows flexibility in the workforce and delivers a better product to the customer.

Another for future training was for 9-1-1 telecommunicators to get call-taking/protocol training, dispatch training to including radio etiquette and codes and signals. How are the addresses of cell phones going to be located in the future? Currently, the system determines a general area due to the pinging of the cell phones but is not able to get a precise position. A telecommunication device for the deaf and hearing-impaired (TDD) was mentioned several times as a topic for training.

Crisis Intervention Training and Wellness. The request for more interactive training on events that have unfortunately become more prevalent. Several respondents made requests for future training on mass casualty events (MCE), natural disasters (hurricanes and tornados), and active shooter scenarios. This curriculum would include workshops dealing with more 9-1-1 telecommunicator safety training (suicide calls, water-related scenarios, persons with mental disabilities or physical challenges, bomb threats, and domestic violence issues). Training on how to access and search the Florida Crime Information Center (FCIC) and the National Crime Information Center (NCIC) for data. Also, get training on how to use the National Incident Management System (NIMS) provided by the Federal Emergency Management Agency (FEMA) to help with disaster scenario planning and complicated logistical plans.

Many of the 9-1-1 telecommunicators expressed a desire for training that would provide comprehensive mental health insight that would help with the mental wellness of this profession. Training to include coping mechanisms to help compartmentalize the day to day stress when handling irate, stressful callers in a difficult situation. Training requests included learning how to relax without alcohol, healthy stress relief, and stress management with a focus on long term self-care. In preparation for MCE's, provide training in critical incident stress management, negotiation techniques, typing skills, suicide prevention, cultural differences training, and map reading to include an understanding of latitude and longitude, phone etiquette, customer service skills, computer skills to include internet searching.

Appendix 6

Feb 17, 2020

Hello PSAP Leadership,

Thank you for taking a few minutes out of your busy schedule and meeting with me. This is Andre' Lanier. The guy doing the study on PSAP Leadership and the effects it has on a Telecommunicator's Organizational Commitment.

Included are the two papers I discussed with you earlier (PSAP Leadership and the Participant Letters). There may be some slight modifications to the official forms I send requesting permissions. I wanted you to see them so you would get an idea of what I will be requesting and what the study entails.

In a nutshell, my study (through the University of Arkansas) titled "The relationship between leadership practices and organizational commitment of telecommunicators" hopes to show the best type of leadership practices within a successful PSAP. There will be a total of 3 surveys (One is demographic only). The other two will involve leadership and organizational commitment. I hope the study will help with the turnover and burnout of the telecommunicators to ensure that PSAP's can meet the needs of their community and their employees.

I am not quite ready to proceed with administering the surveys at this time, but I wanted to meet the leadership so the process will be easier once I am at the stage to perform the surveys. If there are any questions, please do not hesitate to contact me.

Every bit of information will be run through the Institutional Review Board (IRB) of the University of Arkansas before I am allowed to proceed with administering the surveys. The IRB stamp of approval is required to ensure that this study is legitimate, above-board, and, most importantly, will not cause harm.

I hope to be ready to submit the surveys to your PSAP in a couple of months. First, I must complete and defend my choice of topic to my dissertation board (Univ of Arkansas). I hope to have that completed within one month. At that point, I will be able to set up the electronic versions of the surveys and distribute them (once I get your permission).

I appreciate what you do every day and also realize that you do not get enough credit for the lives you save and the people you help.

Thank you in advance for helping me in this endeavor.

Respectfully,
Andre' Lanier
awlanie@uark.edu
███████████

Feb 17, 2020

Dear PSAP Leadership,

My name is André Lanier, and I am a retired US Navy Naval Flight Officer in Orange Park, Florida. Also, I am a doctoral candidate at the University of Arkansas. I am preparing my dissertation on "The relationship among leadership practices and organizational commitment of telecommunicators." The dissertation is focused on the impact of leadership behavior displayed by PSAP administrators and how this affects their subordinates' organizational commitment within their respective agency.

The purpose of this letter is to request your PSAP telecommunicators to participate in this study, which seeks to contribute to the growing body of knowledge in PSAP leadership. The population for this study will be the telecommunicators of participating PSAPs. As this study is of quantitative design, the data will be gathered through one demographic questionnaire and two short surveys.

The survey instruments used will be the Organizational Commitment Questionnaire (OCQ) and the Multifactor Leadership Questionnaire (MLQ 5X-Short). Both surveys have been deemed valid and reliable based on previous research studies. The timeframe for completion is approximately 10-15 minutes. A brief description of each survey is as follows: 1. Organizational Commitment Questionnaire (OCQ) – This instrument was developed by Mowday, Porter, and Steers (1979) to measure the relative strength of an individual's commitment to their work organizations. 2. Multifactor Leadership Questionnaire (MLQ-5X-Short) - This instrument was developed by Bass (1985) and colleagues to measure transformational and transactional leadership behaviors.

This survey was specifically designed to be completely anonymous and voluntary. NO personal information on the participant or individual will be collected. Approval for this study has also been sought through the Institutional Review Board (IRB) at the University of Arkansas.

I am calling on you to allow your staff to voluntarily share their experiences within the telecommunication profession to participate in this study by completing the demographic questionnaire along with the OCQ and the MLQ (5X-Short). These surveys would be distributed electronically to your staff via email through your office.

I would like to thank each of you in advance for your consideration. All data collection results will be stored on a USB memory key that will be secured on a password-protected USB memory device in a locked safe at the researcher's home. The information will be safely stored in this locked safe, which is secured in this researcher's residence for a minimum of three years. When no longer necessary for research, all reports and demographic questionnaire information will then be destroyed.

If you have any questions, please contact this researcher at ███████████ or by email at awlanie@uark.edu. You may also contact my Dissertation Mentor and Academic Advisor, Dr. Kit Kacirek, at her office at the University of Arkansas at 479-575-4875, or

kitk@uark.edu. Further questions or concerns about your rights as a human subject can be directed to the Institutional Review Board at the University of Arkansas at 479-575-2208, or by mail c/o Ro Windwalker, CIP, Institutional Review Board Coordinator, University of Arkansas, 109 MLKG Building, Fayetteville, AR 72701-1201.

Sincerely,

André Lanier
University of Arkansas
Adult Lifelong Learning
awlanie@uark.edu
███████████

Feb 17, 2020

Dear Potential Participant,

My name is André Lanier. I am a retired US Navy Naval Flight Officer in Jacksonville, Florida. Also, I am a doctoral candidate at the University of Arkansas. I am preparing my dissertation on "The relationship between leadership practices and organizational commitment of telecommunicators." The dissertation is focused on the impact of leadership behavior displayed by PSAP administrators and how they affect their subordinates' organizational commitment within their respective agency.

The purpose of this letter is to request you to participate in this study, which seeks to contribute to the growing body of knowledge in PSAP leadership. The sample population for this study will be the telecommunicators of participating PSAPs. As this study is of quantitative design, the data will be gathered through a demographic questionnaire and two short surveys.

The survey instruments used will be the following: 1. Organizational Commitment Questionnaire (OCQ) – This instrument was developed by Mowday, Porter, and Steers (1979) to measure the relative strength of an individual's commitment to their work organizations. 2. Multifactor Leadership Questionnaire (MLQ 5X-Short) - This instrument was developed by Bass (1985) and colleagues to measure transformational and transactional leadership behaviors. All surveys have been deemed valid and reliable, based on previous research studies.

The timeframe for completion of these survey instruments is approximately 10-15 minutes. Permission to conduct this study within your agency was given by your administrative leadership. This permission does not imply any requirement or expectation that you participate in the study.

This survey was specifically designed to be completely anonymous and voluntary. NO personal information on the participant or individual will be collected. You as a participant and your responses will remain anonymous and will not be directly shared with your administrative leadership, nor will your agency be specifically named in the study. Approval for this study has also been sought through the Institutional Review Board (IRB) at the University of Arkansas.

I am calling on you to voluntarily share your experiences within the law enforcement profession to participate in this study by completing the demographic questionnaire along with the OCQ and the MLQ 5X-Short surveys.

I would like to thank each of you in advance for your consideration. All data collection results will be stored on a USB memory key that will be secured on a password-protected USB memory device in a locked safe at the researcher's home. The information will be safely stored in this locked safe, which is secured in this researcher's residence for a minimum of three years. When no longer necessary for research, all reports and demographic questionnaire information will then be destroyed.

If you have any questions, please contact this researcher at ████████████ or by email at awlanie@uark.edu. You may also contact my Dissertation Mentor and Academic Advisor, Dr. Kit Kacirek, at her office at the University of Arkansas at 479-575-4875, or kitk@uark.edu. Further questions or concerns about your rights as a human subject can be directed to the Institutional Review Board at the University of Arkansas at 479-575-2208, or by mail c/o Ro Windwalker, CIP, Institutional Review Board Coordinator, University of Arkansas, 109 MLKG Building, Fayetteville, AR 72701-1201.

Sincerely,

André Lanier, MS
University of Arkansas
Adult Lifelong Learning
awlanie@uark.edu
████████████████

Mar 2, 2020

PSAP Leadership,

                Good afternoon. I just wanted to touch base with you on the status of the research project for the relationship of PSAP Leadership Practices and the Organizational Commitment of 9-1-1 Telecommunicators.

First, again, Thank You for your time and patience with this.

I have gotten authorization from the Institutional Review Board (IRB) from the University of Arkansas to conduct the study. I have included that notice with this email as well as the IRB Informed Consent Form. One major hurdle down there.

We hope to have a test link completed by Monday or Tuesday of next week. Once the test link is validated and functional for all the questionnaires, we will be ready to send out the survey (the three questionnaires will be combined). Shortly after confirmation of the link, I will send out another email for distribution to your people, letting them know that a survey is happening soon, and we are requesting their support in this. The more excited and enthusiastic you are about the survey, the more responses we will get. I know, another request from this guy...

About a week after that (Mar 16), I will send out the link to the live survey for your agency through you as the point of contact.

We are very close to getting this ready for distribution.

If you have any questions, please do not hesitate to holler at me.

Again, THANK YOU for all of your support.

Respectfully,

Andre' Lanier
awlanie@uark.edu
████████████████

Mar 12, 2020

Dear PSAP Leadership,

Good Morning. Thank you for your support with this research. The study is currently live. The plan is to deliver the surveys to your agency on Monday, Mar 16. The survey will be open for two weeks (close date of Mar 29). On Monday (Mar 16), as the PSAP Leadership Point of Contact, I will send you an email (with the survey link) in which I request you send out to your 9-1-1 telecommunicators through your internal distribution list. This link will provide the 9-1-1 telecommunicator with a copy of the Institutional Review Board (IRB) Consent and directions for completion of the surveys. The survey will be accessible for two weeks from delivery.

I will send an additional email tomorrow, which will include the Participant Request Form for the 9-1-1 Telecommunicators to review. I am requesting you send this to your 9-1-1 telecommunicators through your internal distribution list. This form will help explain the purpose of the survey to the 9-1-1 Telecommunicators. The email being sent will also provide information on the survey characteristics.

One week after the surveys are released, I will send out a reminder email requesting the completion of the surveys. This will come through your email address with a request to send out through your internal distribution list.

As we have discussed, this community is often taken for granted and overlooked. The more we can help the 9-1-1 Telecommunicators, the more we can also help the PSAP Leadership. I hope this survey will allow for us to figure out how to reduce Turnover, Burnout, and Stressors associated with the wonderful people who take on this challenging job.

I know I am asking a lot of you, and please know how much I appreciate your support in this endeavor.

1. Mar 12 – PSAP Leadership Information email (this email)
2. Mar 13 – 9-1-1 Telecommunicator explanation email, PSAP Leadership distribute please
3. Mar 16 – Email with a link to surveys will be sent to PSAP Leadership to distribute please
4. Mar 23 – Reminder email will be sent requesting completion of the survey. PSAP Leadership distribute please.

Thank You.

Respectfully,

André Lanier
University of Arkansas
Doctoral Candidate
awlanie@uark.edu
████████████

Mar 13, 2020

Hello PSAP Leadership,

              Good Morning. On Monday, the survey time period is going to open. I am requesting that you send the Potential Participant Request (attached) to your 9-1-1 Telecommunicators today as well as the information below. This is to let them know a survey will soon be provided to them from a researcher with the University of Arkansas. A template for this request follows (feel free to change as you desire):

Hello 9-1-1 Telecommunicators,

              Good Morning. Your agency has been selected, and authorization has been given for a research study to be conducted in your PSAP electronically. The survey is being implemented by the survey company Mind Garden©, Inc. They are nationally recognized for their integrity. The survey is on perceived leadership practices and its effect on organizational commitment of 9-1-1 telecommunicators. The design of the survey is to improve the PSAP community. This researcher would like to find a way to help reduce turnover, burnout, and stressors of those willing to take on this challenging job.

      The survey should take approximately 15 minutes to complete. The surveys include a demographic, leadership, organizational commitment questionnaire. There is an open-ended question (demographic questionnaire) that will allow the 9-1-1 telecommunicator to provide input on future training desires and or needs.

      If you start the survey and are interrupted, please just minimize it and continue when you get the chance. If you do not want to participate in the survey while on duty, please feel free to send the link to your home account and complete it there. If you have any trouble accessing the survey, please do not hesitate to give me a call or send me an email. I will get the answer in a very short time.

      This survey is completely voluntary and completely anonymous. The more participation there is, the better the results and better changes we can make in our PSAP communities. The survey time period will begin Monday, Mar 16, and will end Sunday, Mar 29. Your help with this research is very much appreciated and can only help this wonderful profession.
Thank You.

Respectfully,

André Lanier
University of Arkansas
Doctoral Candidate
awlanie@uark.edu

Mar 13, 2020 – This email was sent directly to the 9-1-1 Telecommunicators (Station name removed for anonymity)

9-1-1 Telecommunicators,

           Your agency has been selected, and authorization has been given for a research study to be conducted in your PSAP electronically. The survey is being implemented by the survey company Mind Garden©, Inc. They are nationally recognized for their integrity. The survey is on perceived leadership practices and its effect on organizational commitment of 9-1-1 telecommunicators. The design of the survey is to improve the PSAP community. This researcher would like to find a way to help reduce turnover, burnout, and stressors of those willing to take on this challenging job.

     The survey should take approximately 15 minutes to complete. The surveys include a demographic, leadership, organizational commitment questionnaire. There is an open-ended question (demographic questionnaire) that will allow the 9-1-1 telecommunicator to provide input on future training desires and or needs.

     If you start the survey and are interrupted, please just minimize it and continue when you get the chance. If you do not want to participate in the survey while on duty, please feel free to send the link to your home account and complete it there. If you have any trouble accessing the survey, please do not hesitate to give me a call or send me an email. I will get the answer in a very short time.

     This survey is completely voluntary and completely anonymous. The more participation there is, the better the results and better changes we can make in our PSAP communities. The survey time period will begin Monday, Mar 16, and will end Sunday, Mar 29. Your help with this research is very much appreciated and can only help this wonderful profession.

Thank You.

Respectfully,

André Lanier
University of Arkansas
Doctoral Candidate
awlanie@uark.edu

Mar 16, 2020

PSAP Leadership,
                Good Morning. Please forward to your 9-1-1 telecommunicators.

Good Morning PSAP Telecommunicators,
                                        I hope the weekend was great for everyone. You will find that the survey is straight forward. Your answers will allow us to tailor future training requirements in the PSAPs. Below is the link required to access the surveys introduced last week. PLEASE copy and paste the link below into your browser (Cntrl & Click will not take you to the correct start point). By copying and pasting, you will be taken to the start page of the survey.

https://transform.mindgarden.com/survey/31137/29e

The survey should take approximately 15 minutes to complete. If you have any questions or concerns, please do not hesitate to contact me.

Thank you again for all of your support in this research of the 9-1-1 profession.

Together we can make this an even better place to work.

Respectfully,

André Lanier
University of Arkansas
Doctoral Candidate
awlanie@uark.edu
███████████

Mar 16, 2020 – This email was sent directly to the 9-1-1 Telecommunicators (Station name removed for anonymity)

9-1-1 Telecommunicators,

I hope the weekend was great for everyone. You will find that the survey is straight forward. Your answers will allow us to tailor future training requirements in the PSAPs. Below is the link required to access the surveys introduced last week. PLEASE copy and paste the link below into your browser (Cntrl & Click will not take you to start point). By copying and pasting, you will be taken to the start page of the survey.

https://transform.mindgarden.com/survey/31137/29e

The survey should take approximately 15 minutes to complete. If you have any questions or concerns, please do not hesitate to contact me.

Thank you again for all of your support in this research of the 9-1-1 profession.

Together we can make this an even better place to work.

Respectfully,

André Lanier
University of Arkansas
Doctoral Candidate
awlanie@uark.edu

Mar 25, 2020

PSAP Leadership,

Good Morning. I cannot tell you how much I appreciate your support with this research. Responses to the survey started coming in on Monday when we went live. Thank You. I know that my timing with the start of the survey time period is not the greatest, but it had been in the works for about six months. Your agency is one of 9 that are part of the study for northern Florida. Overall, I can only guess how intense your work life, and by proxy, your personal life has been recently. My last email stated I would contact you on Monday (Mar 23), but I held off contacting you due to the thought of how busy you would be after the weekend (if you even got any days off).

I have talked with several of your peers in the PSAPs that are included in the study and some of the disruption this COVID-19 has created. A few ideas were bounced around, but the consensus was to continue with the study and not pause it. I also discussed the options with my dissertation chair. Her suggestion was not to pause the study but extend the time period of the study being open for completion. This is so when this COVID-19 pandemic starts to ebb; the 9-1-1 Telecommunicators can take the time to mentally focus on other things besides the craziness that has been happening in their lives. The plan is to extend the survey's time frame through Apr 19.

I know (and rightfully so) that the study is not at the top of anyone's priority list.

I am going to ask another favor of you due to extending the time period of the survey. Before I ask this favor, please note, that if this is a bother, just let me know and I will cease and desist until you tell me you are ready. The favor is to forward a reminder every other Wednesday (which I will send to you on Tuesday night or Wednesday morning) each of those weeks to your 9-1-1 Telecommunicators to please complete the survey if they have not already done so.

As important as the results are for the study and the good we can do for the PSAP Community, I do not want this study to add any stressors to an already stressful period.

I hope you can get the chance to catch your breath soon and often.

Stay Healthy and Thank You for taking care of all of us.

Respectfully,

André Lanier
University of Arkansas
Doctoral Candidate
awlanie@uark.edu
███████████

Apr 1, 2020

Hello PSAP Leadership,

Good Morning. I hope that things are slowing down for you, your family, and your teams. As previously discussed, could you please distribute the following email to your people.

This will be the second to last time I will request this favor. The survey will close on Sunday, Apr 19. I will send out to final reminder the Wednesday prior. I know I have asked (and bothered) you with this, please know how appreciative I am for your support.

Good Morning 9-1-1 Telecommunicators,

I hope this email finds you, your family, and your peers healthy. I know you have seen a few emails requesting you to complete the surveys from the below link. Many of you have completed them so far, and it is greatly appreciated. With the anonymity of the surveys, I cannot tell who has completed them. Sorry to bother you with this request if you have completed them. If you have not completed the surveys, I am asking that you please do. This research will help this great community get even better.

The survey time frame has been extended through Sunday, Apr 19. We know the survey is not your highest priority, but we wanted to try and get max participation as the pandemic (hopefully) starts to slow down. PLEASE copy and paste the link below into your browser (Cntrl & Click will not take you to the correct start point). By copying and pasting, you will be taken to the start page of the survey.

https://transform.mindgarden.com/survey/31137/29e

The survey should take approximately 15 minutes to complete. If you have any questions or concerns, please do not hesitate to contact me.

Stay healthy.

Thank You for being on the front line.

Respectfully,
Andre' Lanier
awlanie@uark.edu
████████

Apr 1, 2020 - This email was sent directly to the 9-1-1 Telecommunicators (Station name removed for anonymity)

9-1-1 Telecommunicators,

      I hope this email finds you, your family, and your peers healthy. I know you have seen a few emails requesting you to complete the surveys from the below link. Many of you have completed them so far, and it is greatly appreciated. With the anonymity of the surveys, I cannot tell who has completed them. Sorry to bother you with this request if you have completed them. If you have not completed the surveys, I am asking that you please do. This research will help this great community get even better.

The survey time frame has been extended through Sunday, Apr 19. We know the survey is not your highest priority, but we wanted to try and get max participation as the pandemic (hopefully) starts to slow down. PLEASE copy and paste the link below into your browser (Cntrl & Click will not take you to the correct start point). By copying and pasting, you will be taken to the start page of the survey.

https://transform.mindgarden.com/survey/31137/29e

The survey should take approximately 15 minutes to complete. If you have any questions or concerns, please do not hesitate to contact me.

Stay healthy.

Thank You for being on the front line.

Respectfully,
Andre' Lanier
awlanie@uark.edu

Apr 15, 2020

Hello PSAP Leadership,

Good Morning. I hope that life is somehow slowing down for you, your family, and your teams. As previously discussed, could you please distribute the following email to your people.

This is the last time I am requesting this favor. The survey will close on Sunday, Apr 19, at midnight. The response has been good, but I am hoping with one final push, we can move the results to excellent. I know I have asked (and bothered) you with this, please know how appreciative I am for your support.

Good Morning 9-1-1 Telecommunicators,

I hope this email finds you, your family, and your peers healthy. This is the last reminder requesting you to complete the surveys from the below link. The survey time ends Sunday, Apr 19 at midnight. Many of you have completed them so far, and it is greatly appreciated. With the anonymity of the surveys, I cannot tell who has completed them. Sorry to bother you with this request if you have completed them. If you have not completed the surveys, I am asking that you please do. This research will help this great community get even better.

We know the survey is not your highest priority during this pandemic, but we wanted to try and get max participation as the pandemic (hopefully) starts to slow down. PLEASE copy and paste the link below into your browser (Cntrl & Click will not take you to the correct start point). By copying and pasting, you will be taken to the start page of the survey.

https://transform.mindgarden.com/survey/31137/29e

The survey should take approximately 15 minutes to complete. If you have any questions or concerns, please do not hesitate to contact me.

Stay healthy.

Thank You for being on the front line.

Respectfully,
Andre' Lanier
awlanie@uark.edu

Apr 15, 2020 - This email was sent directly to the 9-1-1 Telecommunicators (Station name removed for anonymity)

9-1-1 Telecommunicators,

I hope this email finds you, your family, and your peers healthy. This is the last reminder requesting you to complete the surveys from the below link. The survey time ends Sunday, Apr 19 at midnight. Many of you have completed them so far, and it is greatly appreciated. With the anonymity of the surveys, I cannot tell who has completed them. Sorry to bother you with this request if you have completed them. If you have not completed the surveys, I am asking that you please do. This research will help this great community get even better.

We know the survey is not your highest priority during this pandemic, but we wanted to try and get max participation as the pandemic (hopefully) starts to slow down. PLEASE copy and paste the link below into your browser (Cntrl & Click will not take you to the correct start point). By copying and pasting, you will be taken to the start page of the survey.

https://transform.mindgarden.com/survey/31137/29e

The survey should take approximately 15 minutes to complete. If you have any questions or concerns, please do not hesitate to contact me.

Stay healthy.

Thank You for being on the front line.

Respectfully,
Andre' Lanier
awlanie@uark.edu

Apr 20, 2020

PSAP Leadership,

               Good Morning. I hope this email finds you, your family, and your teams well. Hopefully, things are slowing down a bit for you in all aspects for this crazy time. The study time period has come to a close. I promise not to bug you again about it. The response turned out to be stronger than anticipated with the dynamics of the pandemic happening.

I wanted to say THANK YOU for your support with the study that I am conducting. Without your support, it would not have happened. My educational journey is alive and well because of you.

I truly hope with the results that we get, we will be able to make this community better than it already is. You guys do so much for the community that goes unnoticed by the general public. The general public also knows that you will have their backs on their worst day.

It will probably take a few months for me to put the results (chapter 4) and recommendations (chapter 5) together. Once I defend the entire dissertation, and it is published, I will send you an electronic copy. At that time (or any time), please feel free to holler at me if you have any questions or concerns. I am standing by.

Please pass to all of your 9-1-1 Telecommunicators how much I appreciate them, their patience, and their input.

Again, Thank You for letting me into your world and know that you make a difference.

Very Respectfully,

Andre' Lanier
awlanie@uark.edu
███████████

Appendix 7

UNIVERSITY OF ARKANSAS

To:	Andre W. Lanier
From:	Douglas James Adams, Chair IRB Committee
Date:	02/17/2020
Action:	**Exemption Granted**
Action Date:	02/17/2020
Protocol #:	2001241347
Study Title:	THE RELATIONSHIP BETWEEN LEADERSHIP PRACTICES AND ORGANIZATIONAL COMMITMENT OF TELECOMMUNICATORS.

The above-referenced protocol has been determined to be exempt.

If you wish to make any modifications in the approved protocol that may affect the level of risk to your participants, you must seek approval prior to implementing those changes. All modifications must provide sufficient detail to assess the impact of the change.

If you have any questions or need any assistance from the IRB, please contact the IRB Coordinator at 109 MLKG Building, 5-2208, or irb@uark.edu.

cc: Kit Kacirek, Investigator

Appendix 8

THE RELATIONSHIP BETWEEN LEADERSHIP PRACTICES AND ORGANIZATIONAL
COMMITMENT OF TELECOMMUNICATORS.
Consent to Participate in a Research Study
Principal Researcher: André Lanier
Faculty Advisor: Kit Kacirek

INVITATION TO PARTICIPATE
You are invited to participate in a research study about "The relationship between leadership
practices and organizational commitment of telecommunicators." You are being asked to
participate in this study because you are a 9-1-1 telecommunicator.

WHAT YOU SHOULD KNOW ABOUT THE RESEARCH STUDY

Who is the Principal Researcher?
André Lanier

awlanie@uark.edu

Who is the Faculty Advisor?
Dr. Kit Kacirek
479-575-4875
kitk@uark.edu

What is the purpose of this research study?
The purpose of this study is to determine the impact of leadership behavior displayed by PSAP
administrators and how they affect their subordinates' organizational commitment within their
respective agency.

Who will participate in this study?
The population for this study will be the 9-1-1 telecommunicators (full and part time) and
administrators of participating PSAPs. As this study is of a quantitative design, the data will be
gathered through one demographic questionnaire and two short surveys. Input is requested from
all ages, genders, tenure, and marital status.

What am I being asked to do?
You are being requested to complete the demographic questionnaire and the two short surveys to
help determine which leadership practice will increase your organizational commitment.

What are the possible risks or discomforts?
There are no anticipated risks to participating

What are the possible benefits of this study?
There are no direct benefits to participants, other than helping with scientific research.

How long will the study last?
The surveys will take approximately 10-15 minutes to complete.

Will I receive compensation for my time and inconvenience if I choose to participate in this study?
There is no compensation for completing these surveys

Will I have to pay for anything?
No, there will be no cost associated with your participation.

What are the options if I do not want to be in the study?
If you do not want to be in this study, you may refuse to participate. Also, you may refuse to participate at any time during the study. Your job, your grade, and your relationship within the PSAP will not be affected in any way if you refuse to participate.

How will my confidentiality be protected?
All information will be kept confidential to the extent allowed by applicable State and Federal law. The information will be safely stored in this locked safe which is secured in this researcher's residence for a minimum of three years. When no longer necessary for research all reports and demographic questionnaire information will then be destroyed.

Will I know the results of the study?
At the conclusion of the study the results will be provided to the PSAP leadership for dissemination. You may contact the faculty advisor, Dr Kit Kacirek, at her office 479-575-4875, or kitk@uark.edu or Principal Researcher, André Lanier, at his office ███████████, or awlanie@uark.edu. You will receive a copy of this form for your files.

What do I do if I have questions about the research study?
You have the right to contact the Principal Researcher or Faculty Advisor as listed below for any concerns that you may have.

André Lanier, office ███████████, email awlanie@uark.edu

Dr. Kit Kacirek, office 479-575-4875, email kitk@uark.edu

You may also contact the University of Arkansas Research Compliance office listed below if you have questions about your rights as a participant, or to discuss any concerns about, or problems with the research.

Ro Windwalker, CIP
Institutional Review Board Coordinator
Research Compliance
University of Arkansas
109 MLKG Building
Fayetteville, AR 72701-1201

I have read the above statement and have been able to ask questions and express concerns, which have been satisfactorily responded to by the investigator. I understand the purpose of the study as well as the potential benefits and risks that are involved. I understand that participation is voluntary. I understand that significant new findings developed during this research will be shared with the participant. I have been given a copy of the consent form. By completing this survey, I agree for my responses to be used in this research.

Appendix 9

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	19	23.5	23.5	23.5
	Female	62	76.5	76.5	100.0
	Total	81	100.0	100.0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 24 years old	8	9.9	9.9	9.9
	24-34 years old	28	34.6	34.6	44.4
	Over 34 years old	45	55.6	55.6	100.0
Total		81	100.0	100.0	

Tenure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 4 years	30	37.0	37.0	37.0
	Over 4 years but less than 10 years	19	23.5	23.5	60.5
	Over 10 but less than 20 years	15	18.5	18.5	79.0
	Greater than 20 years	17	21.0	21.0	100.0
	Total	81	100.0	100.0	

Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	34	42.0	42.0	42.0
	Not Married	47	58.0	58.0	100.0
	Total	81	100.0	100.0	

Descriptive Statistics – Organizational Commitment

	N	Mean	Std. Deviation
Willing to put in great deal of effort	81	4.5	1.654
Talk up this organization	81	3.93	1.046
Very Little Loyalty to Org	81	3.84	1.299
Accept any job to stay with Org	81	3.40	1.137
My and Org values similar	81	3.8	1.989
Proud to tell others	81	4.3	0.782
Could work elsewhere if work similar	81	3.14	1.137
Org inspires my best	81	3.88	0.980
Very little change to cause me to leave	81	3.53	1.119
Extremely glad I chose this org	81	4.14	0.848
Not much to be gained here	81	3.72	1.175
Difficult to agree with this org	81	3.53	1.174
Really care about the fate of org	81	4.32	0.739
Best of all orgs to work for	81	3.56	1.049
Mistake to work here	81	4.49	0.808
Valid N (listwise)	81		

Descriptive Statistics – Leadership

	N	Mean	Std. Deviation
Rewards Achievement (CR)	81	2.6407	.94549
Is Productive (EFF)	81	2.7593	1.01560
Generates Extra Effort (EE)	81	2.5358	1.05111
Transformational Leadership	81	2.5790	.91566
Acts With Integrity (IIB)	81	2.5840	1.01593
Builds Trust (IIA)	81	2.71	.951
Coaches and Develops People (IC)	81	2.47	1.049
Encourages Others (IM)	81	2.72	.969
Encourages Innovative Thinking (IS)	81	2.39	.993
Laissez-Faire Leadership	81	1.02	.954
Monitors Deviations and Mistakes (MBEA)	81	1.95	.940
Fights Fires (MBEP)	81	0.85	.928
Generates Satisfaction (SAT)	81	2.80	1.066
Transactional Leadership	81	2.30	.756
Passive Avoidant	81	1.22	1.105
Valid N (listwise)	81		

Cronbach's Alpha

Scale: ALL VARIABLES – Transformational Leadership

Case Processing Summary

		N	%
Cases	Valid	51	63.0
	Excluded[a]	30	37.0
	Total	81	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.966	20

Scale: ALL VARIABLES – Laissez-Faire Leadership

Case Processing Summary

		N	%
Cases	Valid	53	65.4
	Excluded[a]	28	34.6
	Total	81	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.908	8

Scale: ALL VARIABLES - Transactional Leadership

Case Processing Summary

		N	%
Cases	Valid	56	69.1
	Excluded[a]	25	30.9
	Total	81	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.783	8

Scale: ALL VARIABLES – Organizational Commitment

Case Processing Summary

		N	%
Cases	Valid	81	100.0
	Excluded[a]	0	0.0
	Total	81	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.900	15

Appendix 11

Pearson Product Moment Correlation Coefficient

Correlations

		Organizational Commitment	Transformational Leadership
Transformational Leadership	Pearson Correlation	1	.352**
	Sig. (2-tailed)		.001
	N	81	81
Organizational Commitment	Pearson Correlation	.352**	1
	Sig. (2-tailed)	.001	
	N	81	81

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Organizational Commitment	Transactional Leadership
Transactional Leadership	Pearson Correlation	1	.243*
	Sig. (2-tailed)		.029
	N	81	81
Organizational Commitment	Pearson Correlation	.243*	1
	Sig. (2-tailed)	.029	
	N	81	81

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

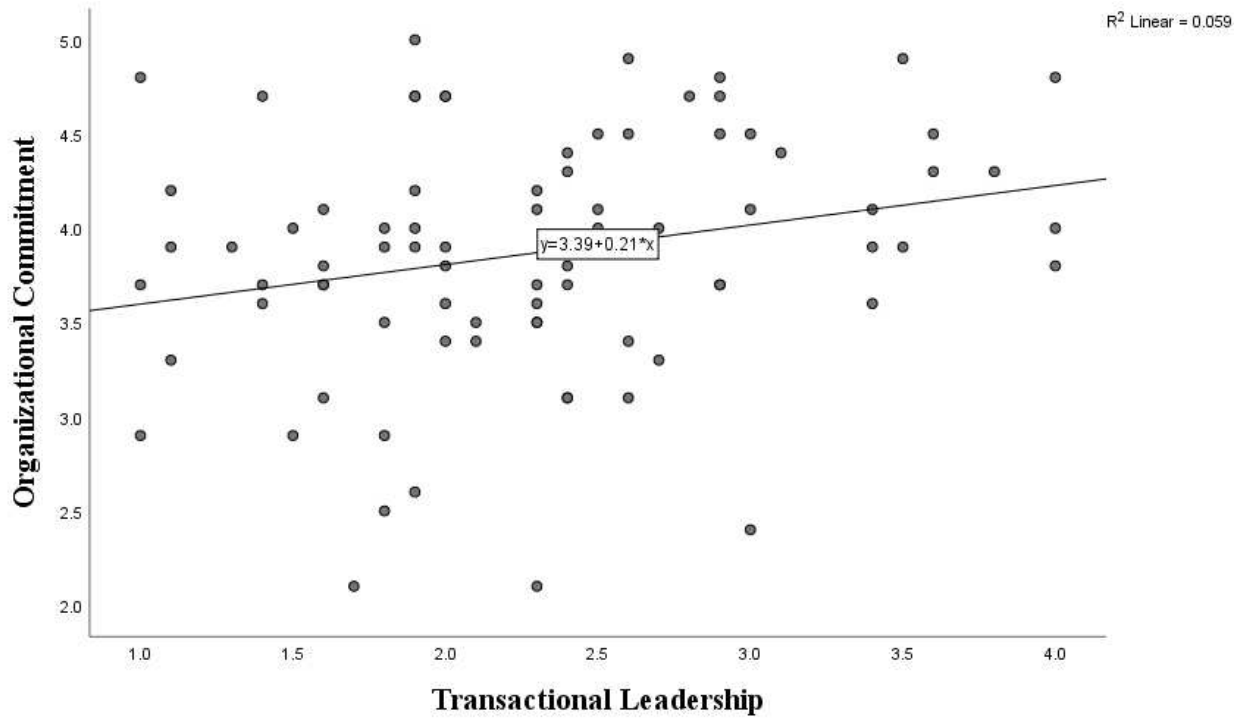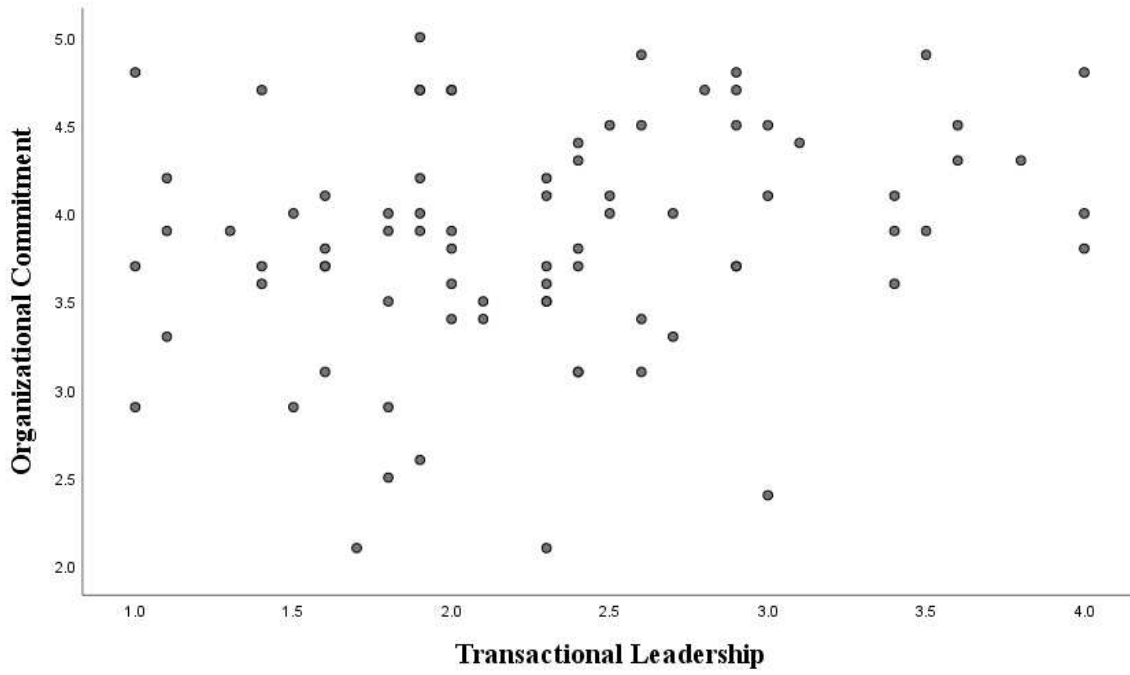|		Organizational Commitment	Laissez-Faire Leadership
Transactional Leadership	Pearson Correlation	1	-.201[*]
	Sig. (2-tailed)		.072
	N	81	81
Organizational Commitment	Pearson Correlation	-.201[*]	1
	Sig. (2-tailed)	.072	
	N	81	81

Appendix 12

Scatter Plots with and without Regression Lines

Transformational Leadership

189
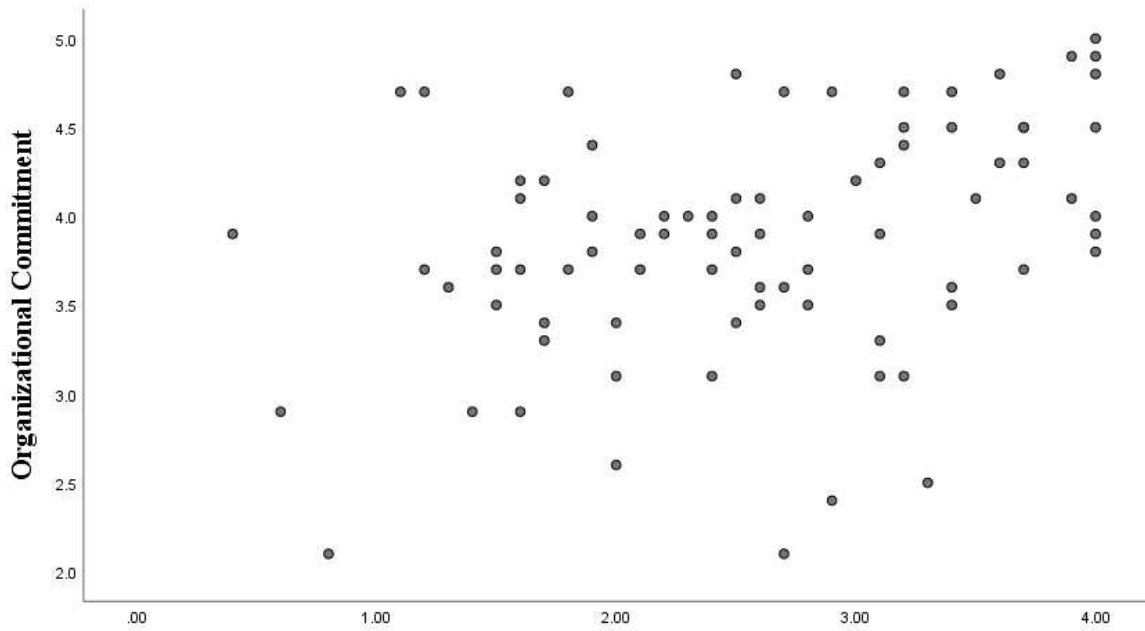
Transactional Leadership
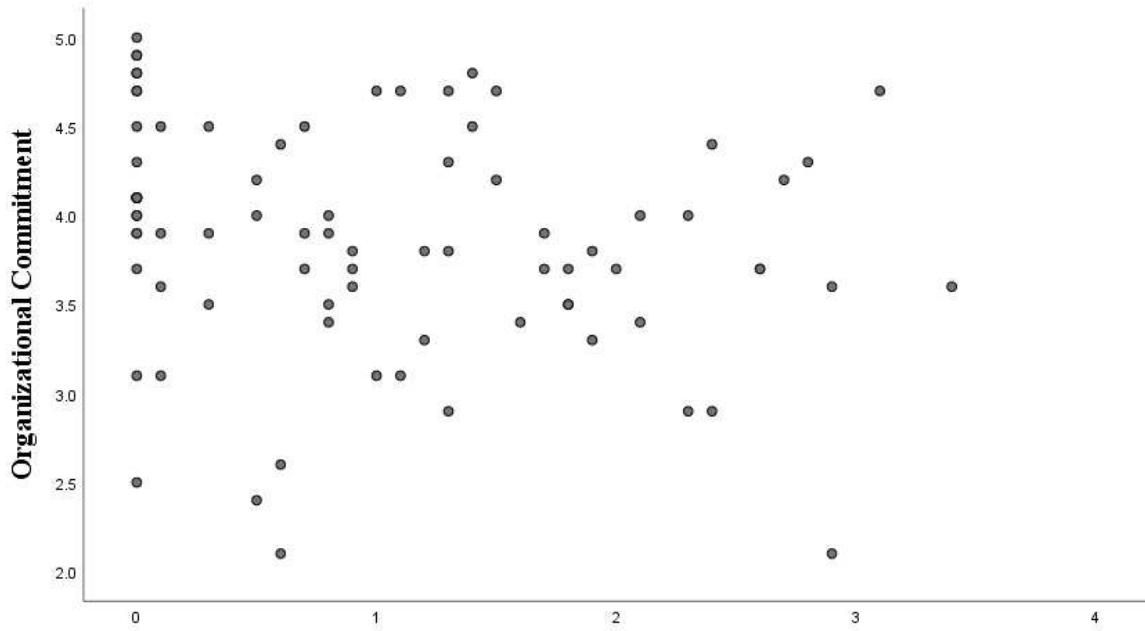
Laissez-Faire Leadership
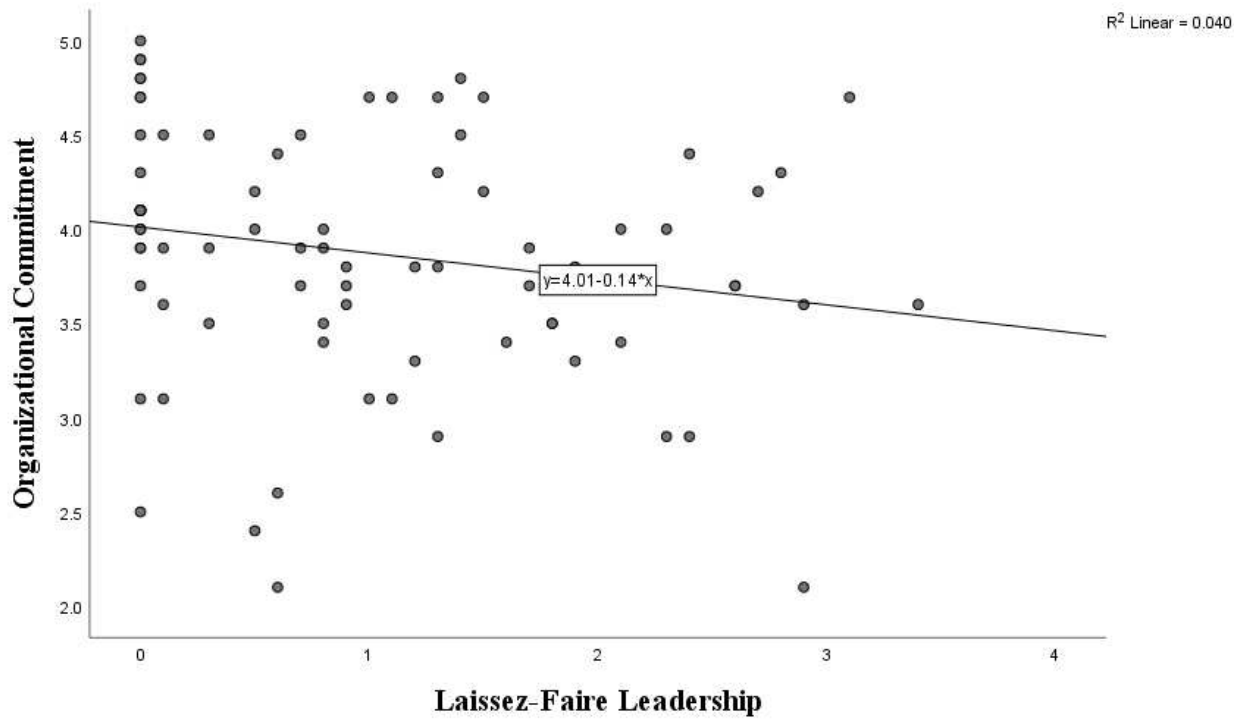
Appendix 13

Regression Tables

Transformational

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.352[a]	.124	.113	.6151

a. Predictors: (Constant), Transformational Leadership
b. Dependent Variable: Organizational Commitment

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.238	1	4.238	11.200	.001[b]
	Residual	29.891	79	.378		
	Total	34.129	80			

a. Dependent Variable: Organizational Commitment
b. Predictors: (Constant), Transformational Leadership

Coefficients[a]

Model		B	Std. Error	Beta	t
			Unstandardized Coefficients		Standardized Coefficients
Sig.					
1	(Constant)	3.222	.205		15.687
.000					
	Transformational	.251	.075	.352	3.347
.001	Leadership				

a. Dependent Variable: Organizational Commitment

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.323	4.228	3.870	.2302	81
Residual	-1.8008	1.2014	.0000	.6113	81
Std. Predicted Value	-2.380	1.552	.000	1.000	81
Std. Residual	-2.928	1.953	.000	.994	81

a. Dependent Variable: Organizational Commitment

Charts

Histogram
Dependent Variable: Organizational Commitment

Mean = 2.86E-15
Std. Dev. = 0.994
N = 81
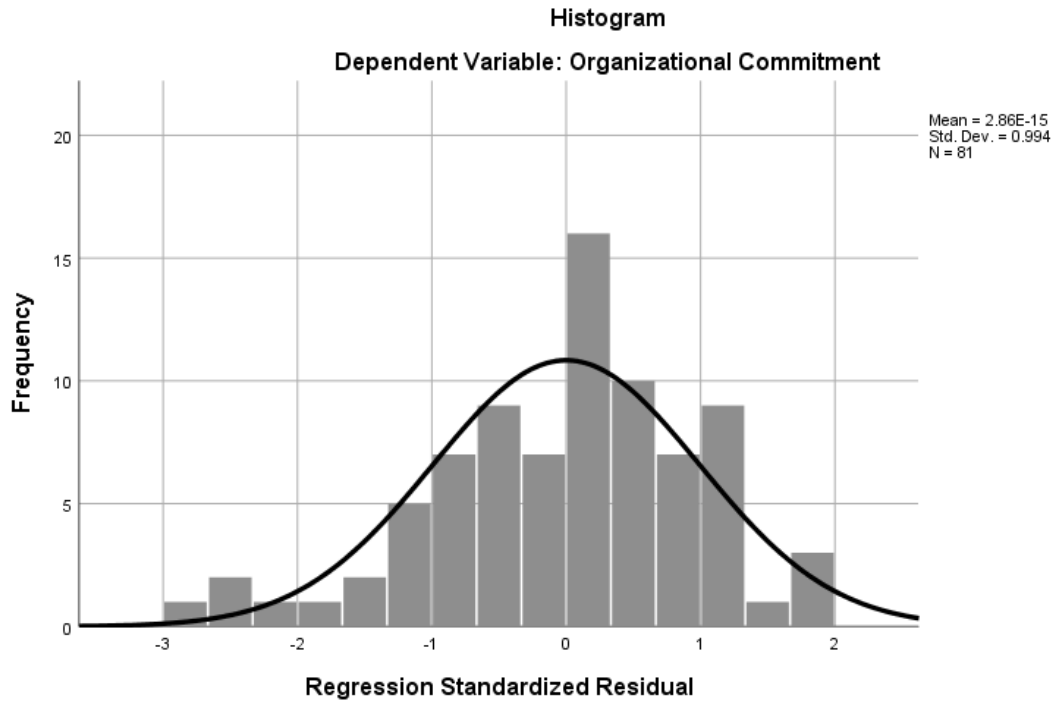
Transactional

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.243[a]	.059	.047	.6376

a. Predictors: (Constant), Transactional Leadership
b. Dependent Variable: Organizational Commitment

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.012	1	2.012	4.950	.029[b]
	Residual	32.117	79	.407		
	Total	34.129	80			

a. Dependent Variable: Organizational Commitment
b. Predictors: (Constant), Transactional Leadership

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.388	.228		14.842	.000
	Transactional Leadership	.210	.94	.243	2.225	.029

a. Dependent Variable: Organizational Commitment

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.597	4.227	3.870	.1586	81
Residual	-1.7701	1.2138	.0000	.6336	81
Std. Predicted Value	-1.721	2.247	.000	1.000	81
Std. Residual	-2.776	1.904	.000	.994	81

a. Dependent Variable: Organizational Commitment

Charts

Histogram

Dependent Variable: Organizational Commitment

Mean = 3.70E-15
Std. Dev. = 0.994
N = 81
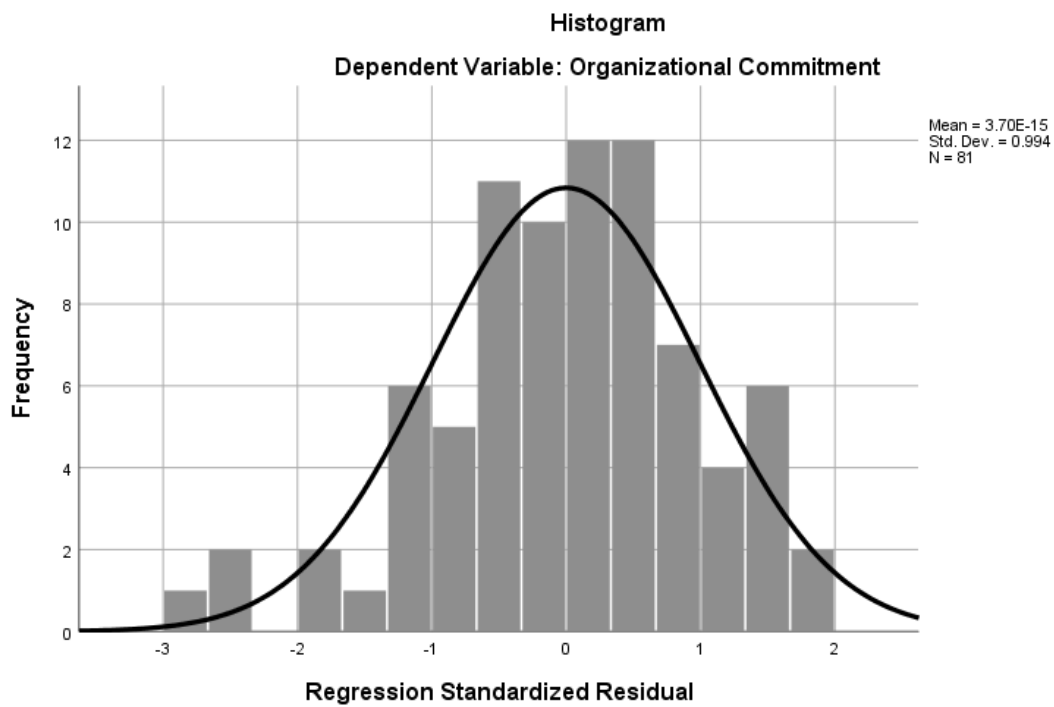
Laissez-Faire

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.201[a]	.040	.028	.6439

a. Predictors: (Constant), Laissez-Faire Leadership
b. Dependent Variable: Organizational Commitment

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.378	1	1.378	3.324	.072[b]
	Residual	32.751	79	.415		
	Total	34.129	80			

a. Dependent Variable: Organizational Commitment
b. Predictors: (Constant), Laisse-Faire Leadership

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.011	.105		38.088	.000
	Laissez-Faire Leadership	-.138	.075	-.201	-1.823	.072

a. Dependent Variable: Organizational Commitment

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.544	4.011	3.870	.1312	81
Residual	-1.8288	1.1150	.0000	.6398	81
Std. Predicted Value	-2.489	1.074	.000	1.000	81
Std. Residual	-2.840	1.732	.000	.994	81

a. Dependent Variable: Organizational Commitment

Charts

Histogram

Dependent Variable: Organizational Commitment

Mean = 2.60E-15
Std. Dev. = 0.994
N = 81