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THE RELATIONSHIP BETWEEN ORGANIZATIONAL COMMITMENT,
DISCRETIONARY EFFORT, AND TURNOVER INTENT

by

John Paul Sherk

A Dissertation
Submitted to the Graduate School,
the College of Arts and Sciences
and the School of Interdisciplinary Studies and Professional Development
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

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ABSTRACT

Unemployment has fallen to 3.7%, the lowest level in 50 years (United States Department of Labor, 2019a). Additionally, 6.9 million jobs are left unfilled (United States Department of Labor, 2019b). A workforce gap has developed between the number of available, qualified workers and the number of jobs that need to be filled (United States Department of Labor, 2019b). This gap has created a new reality for millions of workers who are experiencing unprecedented competition for their talent, which also brings an unprecedented challenge for business owners and managers to find new and better ways to recruit, motivate, and retain talent (Carnevale & Smith, 2017).

In order to better understand the experience of employees in this new environment, this study surveyed a highly skilled and in-demand workforce, air conditioning mechanics, to determine the relationship between the three components of organizational commitment (desire, cost, and obligation) and two outcomes of organizational commitment (discretionary effort and intent to turnover). The Three Component Model of Organizational Commitment (Meyer & Allen, 1991) and Self-Determination Theory (Deci & Ryan, 2012) formed the theoretical foundations of the study. The study found a statistically significant relationship between the commitment component desire to discretionary effort and the commitment component obligation to discretionary effort.

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CHAPTER I – INTRODUCTION

The current U.S. job market is flourishing: as of March 2019, the U.S. Department of Labor reported unemployment has fallen to 3.7%, the lowest level in 50 years (United States Department of Labor, 2019a). Additionally, 6.9 million open jobs are left unfilled (United States Department of Labor, 2019b). A workforce gap exists between the number of jobs open and the number of qualified workers to fill them, with millions of employees facing a new reality as other firms compete for their talent (United States Department of Labor, 2019b). Consequently, owners and senior managers are facing the challenge of retaining talent and bringing top levels of effort out of their workforce in an environment not seen in two generations (Carnevale & Smith, 2017).

This chapter begins with the background to the study, including the current workforce gap, self-determination theory (SDT), organizational commitment, intent to turnover, and discretionary effort. The problem statement, purpose statement, significance of the study, research objectives, limitations, assumptions, design controls, and definitions of key terms are also presented.

Background

A study of the nature of an employee's commitment to the organization for which they work and an understanding of their inner motivational constructs may reveal new dynamics related to the workforce gap. This background introduces the reader to SDT, along with three components of organizational commitment—desire, cost, and obligation—as defined in the three component organizational commitment model (Meyer & Allen, 1991). In addition, this section discusses intent to turnover and discretionary effort, two outcomes of organizational commitment (Meyer & Herscovitch, 2001). The

workforce gap, defined as the current gap between available jobs and the number of available employees in multiple job markets, is also reviewed.

Current Workforce Gap

Throughout the U.S. and many other parts of the globe, a workforce gap exists between the number of available jobs and the number of qualified employees available to fill them (Carnevale & Smith, 2017; Robertson & El-Agamy, 2017; Uy, 2016). Qualified employees are far too few to fill the need, not only in the United States, but also globally.

In the Philippines in 2014 and 2015, 4.23 million domestic and international job vacancies were offered in job fairs (Uy, 2016). However, only 1.29 million applicants were documented, and of these applicants, only 391,000 were hired (Uy, 2016). In South Africa, the workforce gap is apparent again as graduates look for jobs (Robertson & El-Agamy, 2017). The training and education offered by the South African basic and tertiary education sectors is misaligned with the needs and requirements for jobs in the private sector (Robertson & El-Agamy, 2017). In New Zealand, more employees are entering the market, but not at the pace jobs are being created, especially in industries requiring highly-skilled employees (Hays Global Skills Index, 2017). Highly skilled employees have been absorbed into existing job opportunities, but the number of unfilled jobs continues to climb (Hays Global Skills Index, 2017).

In the U.S., the workforce gap is prevalent across industries. In 2013, more than three million jobs were vacant in the U.S., while approximately 14 million jobless people could not find work (Shipps & Howard, 2013). By August 2017, 6.2 million job vacancies were reported in the U.S., which rose to 6.9 million vacancies just 1 year later (United States Department of Labor, 2019b). However, employees with appropriate

skills could not be found to fill these vacancies (Smarick, 2017). In September 2017, U.S. Secretary of Labor Alexander Acosta visited a local Carpenter's Union Training Center, commenting in his speech, "Across industries we have a mismatch between the skills the workplace demands and the skills our educational institutions provide our workforce" (Davis, 2017).

The workforce gap appears in both technically educated and blue collar labor markets. In 2017, approximately 490,000 computing job vacancies were reported in the U.S., while only 43,000 computer science students graduated into the workforce (Code.org, 2019). Likewise, 79% of construction and construction-related maintenance companies report difficulty finding skilled, blue collar employees such as welders, pipe fitters, air conditioning mechanics, and carpenters (The Associated General Contractors of America, 2016).

Nearly all employees may be facing a workforce reality that has not been seen before. Because of the workforce gap, an increasing number of jobs and opportunities are available (United States Department of Labor, 2019b). The number of job opportunities raises the stakes for employers and owners to understand how not only to retain employees, but also how to keep them motivated and committed. Clearly, the workforce gap is real and presents new challenges for leaders and managers.

Meanwhile, the workforce gap may also impact the ways in which employees are motivated (Carnevale & Smith, 2017). In order to manage their own experience at work, employees need to understand the dynamics of commitment and motivation (Carnevale & Smith, 2017). Understanding the deeper human framework employees use to interpret the experience of having increased job options begins with understanding SDT.

Self-Determination Theory

Self-Determination Theory purports all human beings have deep psychological needs for competence, autonomy, and positive relationships to others (Deci & Ryan, 2012). According to this theory, social contexts demonstrate their impact on employees by either facilitating or impairing the satisfaction of psychological needs (Deci & Ryan, 2012). The dynamic is informed by SDT in the relationship between the employee and a given social context from the perspective of the employee. Competence is a person's general perception that they have the knowledge, skills, and abilities to engage the tasks in which they choose (Deci & Ryan, 2012). Autonomy has a particular meaning within SDT—to experience autonomy is to engage in a freely chosen activity, with volition and willingness. Moreover, autonomy is a “capacity for and desire to experience self-regulation and integrity” (Deci & Ryan, 2012, p. 85). Relatedness to others is the positive or negative communication and connection one experiences in their social context (Vansteenkiste & Ryan, 2013).

When these three psychological needs (autonomy, competence, and relatedness), are satisfied, the result is human flourishing and well-being. If meeting these psychological needs is thwarted, unhappiness and ill-being follows (Vansteenkiste & Ryan, 2013). The first social contexts in which human beings experience an interactive social context, such as family and school, are chosen for them. If the aforementioned psychological needs are not met in children, those children do not yet have the ability to use commitment to change what they want to alter in their lives. They cannot un-commit to their family and school and commit to something else for their benefit. As adults, however, human beings can usually be more selective when choosing social contexts.

Choosing a social context has a significant impact on the dynamics of commitment for an employee. For adults, the workplace is a social context. The mediating social context for organizational commitment is the organization for which one works (Vansteenkiste & Ryan, 2013).

The construct of organizational commitment involves an employee having a set of options from which one chooses to the exclusion of others (Meyer & Herscovitch, 2001). In the case of organizational commitment, employees select the organization they work for to the exclusion of other organizations. Employees usually make a commitment to an organization with the expectation of some desired outcomes they anticipate will meet some basic needs.

Beyond deep human needs, SDT distinguishes between autonomous (freely chosen) and controlled (specific reward for a specific action) motivation (Gagné & Howard, 2016). Autonomous motivation refers to freely chosen action taken for interest or personal satisfaction. Controlled motivation refers to action taken to obtain some external goal or reward, such as a bonus or some type of reward (Gagné & Howard, 2016). As the dynamic of SDT takes place for an employee, some form of commitment to the organization forms (or does not). Described below, the Meyer-Allen three component model of organizational commitment entails a detailed analysis and explanation of the employee's commitment to the organization.

Meyer-Allen Three Component Model of Organizational Commitment

Self-determination theory explains the motivations leading to an employee's commitment to the organization for which they work. Commitment may be defined as a force that binds an employee to a course of action of relevance to one or more targets

(Meyer & Herscovitch, 2001). Organizational commitment is a force binding an employee to an organization and its goals. Meyer and Allen (1991) developed a three component organizational commitment model which purports any given employee's commitment to the company embodies three components: desire, cost, and obligation. Each component occurs simultaneously, with a greater or lesser intensity individually.

Desire. Desire, or “affective commitment,” may be understood as an employee's emotive tie to their organization (Rhoades, Eisenberger, & Armeli, 2001). Commitment due to an employee wanting to be at an organization is labeled as the desire component of the organizational commitment model. The underlying assumption with desire is that if an employee is emotionally bonded to an organization, their sense of belonging and identification resides where they work (Rhoades et al., 2001). The employee's bond to the organization results in an increased inclination to contribute to the organization's goals and a desire to continue working at the organization (Meyer & Allen, 1991).

Cost. The cost organizational commitment component cost, or “continuance commitment,” is rooted in an employee's perceived cost of leaving their employer (Allen & Meyer, 1996). Employees make emotional, mental, and in some cases financial investments with organizations. Those investments create value, and the employees making those investments are motivated to not lose that value. Howard Becker (1960) was the first researcher to see organizational commitment from this perspective. Becker proposed the concept of a “side bet,” referring to employee investments. Losing such an investment is a perceived cost that motivates the employee to continue with their company. The perception that other job opportunities are available outside one's current organization may motivate an employee to not continue with their organization. As a

simple matter of supply and demand, if few opportunities are available, the perceived value of the current job role increases. Abundant job opportunities challenge the value of the current job. This dynamic of job supply and demand and how it impacts the cost component of organizational commitment adds to the relevance of the workforce gap.

Obligation. The obligation component of the organizational commitment model, or “normative commitment,” is based on an employee’s inner motivation guided by moral duty (Allen & Meyer, 1996). Obligation is often the feeling of loyalty for what is perceived as good treatment in the past by the organization. However, obligation can also be an employee’s feeling of duty and moral purpose driven by the cause of the organization’s mission or values (Meyer & Parfyonova, 2010). In context of the workforce gap, the presence of other available jobs and work opportunities asserts pressure on that feeling of obligation.

Outcomes of Organizational Commitment

The three component organizational commitment model includes a theory of causal relationships between the three organizational commitment components and two separate outcomes: discretionary effort and intent to turnover. Each of the three organizational commitment components separately interact with discretionary effort and intent to turnover as the employee’s outcomes of organizational commitment. According to the three component model, outcomes related to each commitment component are: a) desire will always cause the highest levels of an employee’s discretionary effort and the lowest level of intent to turnover (Meyer & Herscovitch, 2001), b) obligation will cause medium levels of discretionary effort and intent to turnover (Meyer & Herscovitch,

2001), and c) cost will have no impact on their discretionary effort and relate to higher levels of the employee's intent to turnover (Meyer & Herscovitch, 2001).

Outcomes of Organizational Commitment Components Combined. Considering commitment components separately allows consideration of the isolated components of organizational commitment (Meyer & Herscovitch, 2001), the three components must be examined in how they interact with each other as well, as this is how the components naturally occur (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). The varying levels of the three organizational commitment components for any employee create a dynamic of the three components of organizational commitment (desire, cost, and obligation) combined. For example, an employee's desire component could be considered independently from the other two commitment components if the employee's cost and obligation levels are low. However the employee's desire component may be high at the same time in which their obligation component is also high. For example, while a high level of the desire component relates to high levels of discretionary effort when examined independently from the other two commitment components, what if it is combined with a high level of the cost component? In this case, the relationship between separate commitment components and outcomes of commitment could change.

The three component model of organizational commitment also accounts for the interaction between commitment components (Meyer & Herscovitch, 2001). For example, according to Meyer and Herscovitch (2001), desire produces the employee's highest levels of discretionary effort, but discretionary effort is reduced when combined with the employee's perceived cost of leaving the organization. On the other hand, the employee's perceived cost of leaving the organization should lead to lower intent to

turnover rather than no commitment at all, but have no impact on the employee's discretionary effort (Meyer & Herscovitch, 2001).

Intent to Turnover

Intent to turnover is an employee's intent voluntarily to leave or stay at the company for which they currently work (Lloyd, 2008). High turnover intent means the employee intends to leave the company, while low turnover intent means the employee does not intend to leave the company (Morin, Meyer, Dennis, Marsh, & Ganotice, 2015). Throughout this study, intent to turnover referred only to the employee's intent to voluntarily leave and does not refer to being laid off or terminated. In August, 2017, 3.1 million of the 5.2 million employees who separated service in the workplace left their jobs voluntarily (United States Department of Labor, 2019b).

Discretionary Effort

Discretionary effort is volitional effort that contributes to organizational goals above the minimum effort required (Shuck, 2010; Lloyd, 2008). This additional effort may take the form of working longer hours, persistence in completion of a project, or acting with consistency in the face of changing circumstances. An example of changing circumstances would be significant differences in temperature for an employee who works outside. An air conditioning mechanic performing routine preventive maintenance may experience one type of challenge in 75-degree heat, but quite a different challenge in 105-degree heat. Performing the standard tasks in excessive heat requires additional effort to perform the same task. Discretionary effort sometimes increases productivity, but at other times produces the same work product in a more challenging environment. Higher levels of discretionary effort yield a higher quality work product (Lloyd, 2008).

Problem Statement

Having employees fully committed to the organization results in less turnover and increased discretionary effort. Organizations with less turnover and more discretionary effort in their workforce generate increased profit and compete more successfully in the marketplace (SHRM Foundation, 2016). However, the current workforce gap between available jobs and available employees may weaken organizational commitment. Higher turnover within the organization and lower discretionary effort may result in real financial losses for the organization. Failure to address the relationship between organizational commitment, discretionary effort, and intent to turnover may place organizations at risk for losing competitive advantage and the ability to make a profit.

Purpose Statement

The purpose of this study was to determine the relationship between organizational commitment, discretionary effort, and intent to turnover. The study determined the relationship between the three components of organizational commitment (desire, cost, and obligation) separately to discretionary effort, and intent to turnover individually. The study also determined the relationship between organizational commitment components combined to discretionary effort and intent to turnover.

Research Objectives

RO1: Describe the demographic characteristics of the population in terms of work location, work context, and years of service.

RO2: Determine the relationship between perceived discretionary effort and perceived organizational commitment components: desire, cost, and obligation separately.

RO3: Determine the relationship between perceived intent to turnover and perceived organizational commitment components: desire, cost, and obligation separately.

RO4: Determine the relationship between perceived discretionary effort and perceived employee organizational commitment components: desire, cost, and obligation combined.

RO5: Determine the relationship between perceived intent to turnover and perceived employee organizational commitment components: desire, cost, and obligation combined.

Conceptual Framework

Figure 1 below shows the relationships between SDT, organizational commitment theory, and organizational commitment outcomes. The three components of organizational commitment (desire, cost, and obligation), both separately and combined, impact levels of discretionary effort and intent to turnover (Meyer & Allen, 1991). Organizational commitment components, discretionary effort, and intent to turnover function within the framework of SDT (Deci & Ryan, 2008).

This study determines the relationship between the three organizational commitment components (desire, cost, and obligation) both separately and combined. The three component model of organizational commitment theorizes that as intensity of the three components increases or decreases in a given employee, the result will be changes in the intensity of discretionary effort and intent to turnover (Meyer & Allen, 1991). Desire increases discretionary effort and decreases intent to turnover (Meyer & Allen, 1991). Cost increases intent to turnover and decreases discretionary effort (Meyer & Allen, 1991). Obligation causes both intent to turnover and discretionary effort to occur in middle ranges (Meyer & Allen, 1991). In this study these relationships are determined with each commitment component separately and when their impact is combined.

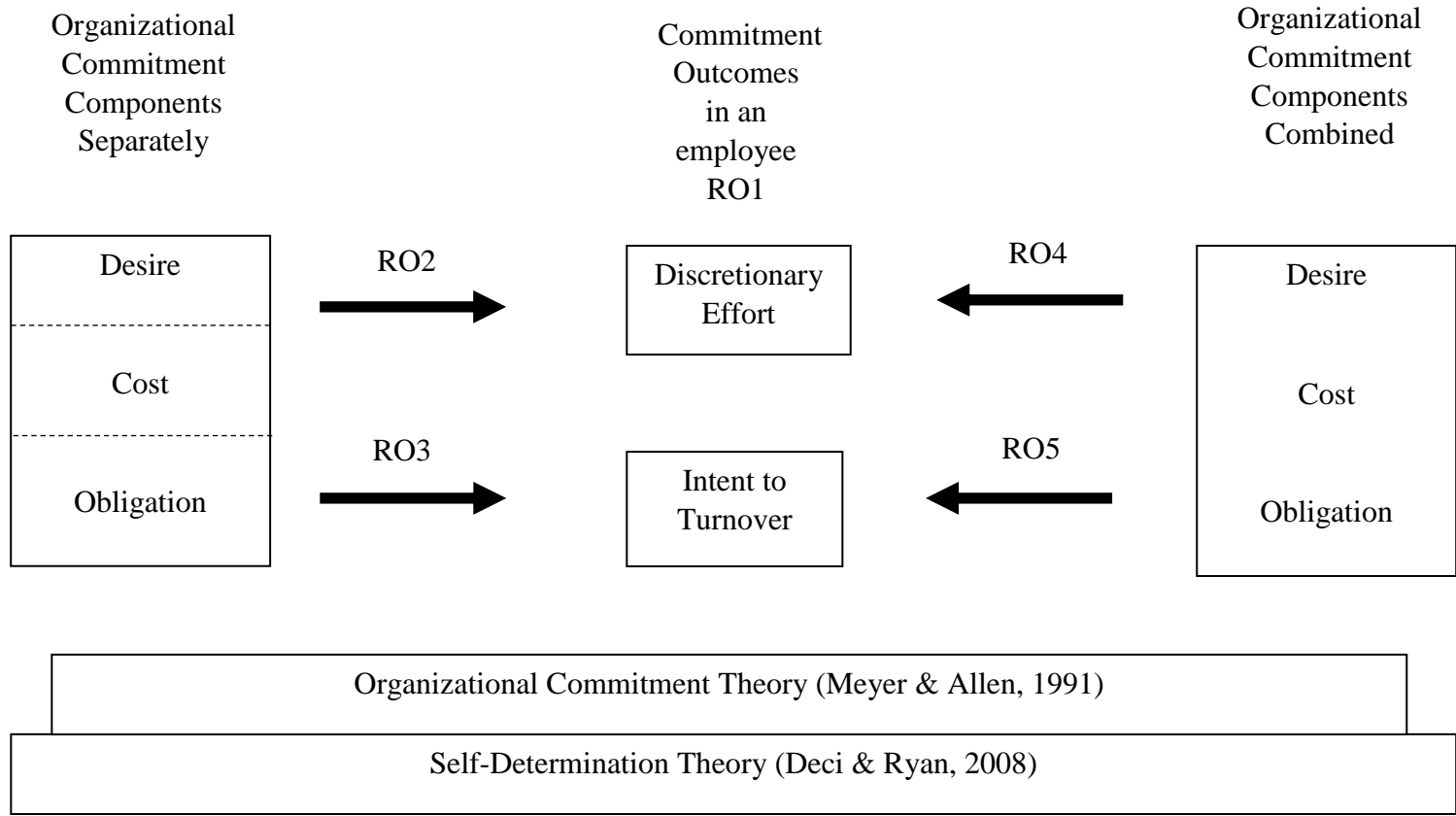


Figure 1. Conceptual framework showing relationships between self-determination theory, organizational commitment theory, and organizational commitment outcomes.

Significance of the Study

By better understanding the relationship between organizational commitment, SDT, and intent to turnover and discretionary effort, new knowledge may reduce the cost of turnover and maximize work product value by retaining current employees. By contributing to lower turnover and greater discretionary effort, this study aimed to contribute to the value created out of the wages annually paid to employees, and position employers to keep the lowest costs possible by retaining their workforce. Additionally, researchers who study organizational commitment would have more data on which to build the broader academic discussion (Meyer & Herscovitch, 2001).

Limitations, Assumptions, and Design Controls

Limitations

Study and design limitations address potential inadequacies in a study's instrumentation, research bias, selected population, sample, or overall design (Creswell, 2003). The population of the study consisted of the technical workforce of a single organization, which aimed to limit generalizability to populations outside this particular company. The research design included a census rather than a sample, meaning there would be no inference with other organizations or industries.

Delimitations

This study measured the relationship between the three component organizational commitment model, discretionary effort, and intent to turnover and determined if a statistically significant relationship can be established between the organizational commitment components and the outcomes above. One delimitation of this study was the three component organizational commitment model. The study did not seek to explore or

understand organizational commitment outside of the model. A second delimitation was the assumption that organizational commitment could be measured with a Likert scale. Additionally, unknown variables could also impact discretionary effort and intent to turnover beyond organizational commitment.

Assumptions

There were several assumptions for this study. The researcher assumed participants would respond honestly and were not motivated to falsify answers or skew the study intentionally. Also assumed was the language of the study would be readable to the respondents and the format of the survey would not hinder the respondents' ability to answer the survey questions.

Definition of Key Terms

Desire. Desire (also, affective commitment) may be understood as an employee's emotional bond to their organization (Rhoades et al., 2001). Desire is a part of commitment that represents wanting to be working at the company for which they work.

Cost. Cost (also, continuance commitment) is an employee's perceived cost of leaving their company. Employees make emotional and mental (and sometimes financial) investments where they work. Losing such an investment is a perceived cost and motivates the employee to continue with their company (Becker, 1960).

Obligation. Obligation (also, normative commitment) is a feeling of loyalty back to the company for perceived good treatment in the past. Obligation can also be a feeling of duty and moral purpose triggered by the organization's mission or values (Meyer & Parfyonova, 2010).

Commitment. Commitment is “a force that binds an individual to a course of action of relevance to one or more targets” (Meyer & Herscovitch, 2001, p. 301).

Organizational Commitment. Organizational commitment is a force that can bind an employee to an organization and its goals (Meyer & Allen, 1991).

Commitment Components. Commitment components are the three modes of commitment: desire, cost, and obligation. Commitment is a single phenomenon with three components and not three separate phenomena (Meyer & Allen, 1991; Meyer & Herscovitch, 2001).

Discretionary Effort. Discretionary effort is “voluntary effort directed toward organizational goals above the minimum work required” (Shuck, 2010; Lloyd, 2008). This additional effort might take the form of working longer hours, persistence in completion of a project, or acting with consistency in the face of changing circumstances.

Intent to Turnover. Intent to turnover is an employee’s conscious intention to leave or not leave the company at which they currently are employed. High intent to turnover means the employee is very much intending to leave the company. Low intent to turnover means the employees is not intending to leave the company (Morin et al., 2015).

Workforce Gap. Workforce gap is the imbalance between the number of available jobs and the number of qualified employees available to fill them. In the current workforce gap, there are many more open jobs for skilled employees than skilled employees to fill them (Carnevale & Smith, 2017; Carnevale, Jaysundera, & Gulish, 2015; Robertson & El-Agamy, 2017; Uy, 2016).

Summary

A workforce gap currently exists between the number of jobs and the number of skilled employees to fill them (Carnevale & Smith, 2017). That gap is creating a new and changing experience for employees in their relationship with the organizations for which they work (Carnevale & Smith, 2017). The motivations of employees in a changing environment may be best understood in the framework of SDT (Deci & Ryan, 2012). According to SDT, an employee's autonomy, competency, and relatedness to others will determine the kind of motivation an employee will experience (Deci & Ryan, 2012). That motivation in turn will guide what type of commitment the employee will ultimately (or daily) make to the organization for which they work.

Organizational commitment is an energy that can bond an employee to an organization and its goals. This chapter reviewed the three fundamental components of organizational commitment: desire, cost, and obligation (Meyer & Allen, 1991). As an organizational commitment component, desire references affective commitment often associated with commitment in common parlance. The second organizational commitment component, cost, aligns with continuance commitment that stems from having made personal investments in the organization (e.g., financial, relational, etc.) an employee may not want to lose. The third organizational commitment component, obligation, is a normative commitment. Sometimes, obligation is expressed as loyalty; other times, it is expressed as identification with the moral components of the organization's cause or values (Meyer & Allen, 1991). When combined, the three emotional and intellectual focus points—desire, cost, and obligation—constitute the phenomenon of organizational commitment. The remainder of this study presents a

review of related literature, a description of the research methodology, the research results, and a final summary of findings and observations.

CHAPTER II – LITERATURE REVIEW

Introduction

The purpose of this study was to determine the relationships between the three component model of organizational commitment, discretionary effort, and intent to turnover. This chapter provides a review of the literature relevant to support the research objectives of this study. The review of literature discusses the history of the formation of the three component model of organizational commitment, as well as discretionary effort and intent to turnover.

Organizational commitment is the psychological and emotional attachment of an employee or workforce to the organization for which they work. Researchers have been defining and dissecting organizational commitment since the 1960s. The consensus of the academic conversation is that organizational commitment has three fundamental components: desire, cost, and obligation (Meyer & Allen, 1991). First, desire refers to a positive, “want to” energy often associated with organizational commitment in common parlance. Desire is expected to produce action in alignment with and in support of the goals of the organization (Allen & Meyer, 1990). Second, cost is a “need to” energy that stems from having made various personal investments in the organization (e.g., financial, relational, etc.). Once those real or perceived investments are made, the cost of losing the value of those investments motivates continuing organizational commitment (Becker, 1960). In some situations, employees may perceive a lack of opportunities with other organizations. Because of simple supply and demand principles, an employee’s perceived lack of outside employment opportunities increases the value of the existing work role and motivates the employee to continue their current organizational

commitment. In both the situation of internal organizational investment and the situation of perceived lack of external employment opportunities, an employee experiences the cost component of commitment because they feel they “need to” be committed—otherwise, they lose their investment in the organization (Allen, 1985). Third, obligation can develop as a component of commitment. Obligation can take the form of loyalty for perceived positive treatment from the organization in the past. In a different manner, an employee’s feeling of morally driven motivation can stem from their alignment with the company’s mission or values. In each of these instances, organizational commitment includes a feeling of “ought to” (Meyer & Allen, 1991). The three emotional and intellectual focus points—desire (“want to”), cost (“need to”), and obligation (“ought to”)—when combined, constitute the construct of organizational commitment.

As organizational commitment actually exists, the three components of commitment (desire, cost, and obligation) occur in various levels and intensities, and not with absolute presence or absence. The notion of organizational commitment is not an either/or proposition that an employee is either committed or not. An employee is committed at different levels and with different blends of the three organizational commitment components. For example, some will have high levels of desire but low levels of obligation. Others will have high levels of cost and low levels of desire. This means all employees have a combined dynamic of organizational commitment components (desire, cost, and obligation) combined. This dynamic is active both in individual employees and as a collective workforce within the organization. As this chapter progresses, each of the three organizational commitment components will be examined separately. However, a fundamental assumption underlying the study was

while each component may be examined independently, they are three components of a single phenomenon and must be understood in the context of the three components of organizational commitment (desire, cost, and obligation) combined, the construct of organizational commitment.

One further clarifying point: The construct under examination is organizational commitment, not career commitment, nor work commitment, nor any other commitment construct. Indeed, unlike the experience of the typical employee in the 1950s and 1960s in which a commitment to one's organization and their career were often synonymous, in 2019, one must separate all other potential targets of commitment in order to fully understand organizational commitment.

Background

As a construct, organizational commitment has been studied with legitimate, peer-reviewed research for 60 to 70 years. The first important and frequently cited publication on organizational commitment was written by Howard Becker in 1960. Becker, a sociologist, commented in his article "Notes on the Concept of Commitment" that in the academic literature he read, the word "commitment" was "enjoying an increasing vogue" (Becker, 1960, p. 32). This was Becker's first attempt to define organizational commitment. In 1979, Mowday, Steers, and Porter (1979) discussed measurement and published a survey instrument to measure organizational commitment. What became the definitive publication was Meyer and Allen's Three Component Conceptualization of Organizational Commitment (Meyer & Allen, 1991). The Meyer and Allen definition of organizational commitment and the survey instrument drafted have been so dominant in the literature that almost every subsequent publication on organizational commitment

either participates in the literature stream of the three component commitment model or openly challenges the model.

With considerable agreement that a committed workforce will benefit an organization (Meyer, 2014), much less agreement exists among organizational development researchers on the definition and meaning of commitment prior to the work of Meyer and Allen (Klein, Becker, & Meyer, 2009; Klein, Cooper, Molloy, & Swanson, 2014). The origin of organizational commitment research was to better understand declining loyalty and increased turnover in the 1950s U.S. workforce (Mowday et al., 1979). Since the 1950s, one of the more often tested and accepted models describing organizational commitment is the three component model developed by John P. Meyer and various colleagues starting in the late 1980s (Allen & Meyer, 1990; Meyer & Allen, 1991; Meyer & Herscovitch, 2001).

As this dissertation sought to further research of the three component organizational commitment model, this literature review discusses organizational commitment broadly and focuses specifically on the historical development and current state of Meyer's model. Reviewing the influential and most cited literature on the topic of organizational commitment since the 1980s is not largely different from simply reviewing John Meyer's publication list. All of Meyer's 46 peer-reviewed academic publications are related to organizational commitment, with his publications cited over 63,000 times (Google, 2017).

Early Attempts at Definition in the 1960s and 1970s

The research focusing on a definition for organizational commitment in the academic and research community began as a response to decreasing loyalty and

increasing turnover among employees in the 1960s and 1970s (Meyer, 2014; Mowday, Porter, & Steers, 1982). One example of an early voice analyzing organizational commitment as a concept is found in Helen Gouldner's article "Dimensions of Organizational Commitment." In this article, Gouldner (1960) asserted "that organizational commitment is not a homogenous and unidimensional variable, but is, instead, a multidimensional phenomenon" (p. 496). The author went on to note variables of the degree of organizational commitment and the form of that commitment (Gouldner, 1960). Gouldner emphasized the difference between commitment to the specific values of the organization and commitment to the organization as a whole. The author's hypothesis is highly similar to the future trajectory of the organizational commitment literature.

The most cited of early attempts to define organizational commitment comes from Howard Becker. According to Becker (1960), the term "commitment" was beginning to "enjoy an increasing vogue in sociological discussion" (p. 14). However, in Becker's own words, prior to the 1960s, "the appearance of the concept of commitment in sociological literature...emerges unscathed by so much as a single reference" (p. 14). This publication is the first of its kind in the history of the academic discussion of organizational commitment. All previous publications assumed a definition of commitment as obvious and a given to researchers who were reading articles that addressed the topic of commitment. However, Becker did not assume the definition of commitment as obvious and a given (Allen, 1985). Thus, the analytical discussion of organizational commitment began with Becker.

Becker (1960) addressed the topic of commitment in “Notes on the Concept of Commitment.” Becker’s interest stemmed from viewing commitment as “an implicit explanation of one mechanism producing consistent human behavior” (p. 32). Understanding consistency in human behavior brought Becker into the organizational commitment conversation, though Becker also claimed that associating consistent human behavior and commitment is tautological. Becker interpreted commitment as requiring behavior to evidence the existence of commitment such that consistent human behavior and commitment were virtually the same thing. Becker’s contribution to the organizational commitment conversation is the metaphor of a “side bet,” one of the earliest attempts at defining commitment.

Drawing on economist Thomas Schelling’s analysis of bargaining (Schelling, 1956), Becker (1960) offered his understanding of the use of a “side bet”:

Suppose that you are bargaining to buy a house; you offer sixteen thousand dollars, but the seller insists on twenty thousand. Now suppose that you offer your antagonist in the bargaining certified proof that you have bet a third party five thousand dollars that you will not pay more than sixteen thousand dollars for the house. Your opponent must admit defeat because you would lose money by raising your bid; you have committed yourself to pay no more than you originally offered. (p. 35)

Therefore, in the context of organizational commitment, the side bet is a type of mingling of an organization-friendly behavior with other personal interests. By combining something of value to the primary action in this way, one has made behaving inconsistently considerably more “expensive.” Once the employee’s continued,

consistent action has consequences for other unrelated interests, the employee is fully aware of the comingling of those interests, and remains consistent with their original committed action (Becker, 1960). Again, it assumes the primary outcome of commitment is consistent behavior (thus, the reference to the tautological argument above). As presented in the history of the organizational commitment discussion, continuing behavior is only one element of the three component organizational commitment model, though Becker's side bet is prominent in any history of the topic.

1970s: The Search for a Guiding Theory

Throughout discussions of commitment up to and during the 1960s, organizational commitment is consistently understood as a) binding the employee to the organization, and b) reducing turnover (Meyer, 2014). As the commitment discussion advanced through the 1970s, studies of organizational commitment examined a combination of the theories of commitment and empirical efforts to determine the antecedents and outcomes of commitment (Mowday et al., 1979). For example, Sheldon (1971) analyzed a group of scientists to determine if employees making investments in the organization would increase organizational commitment, which the author referred to as organizational identification. Sheldon's research revealed organizational commitment increased with the addition of social commitments. Sang Lee (1971) studied scientists to determine factors that impacted an employee's level of organizational identification and found the most significant factor was the opportunity for professional achievement within the organization. Bruce Buchanan (1974) surveyed a group of managers and revealed the factors that increased organizational commitment included social interaction, job achievement and hierarchical advancement, though this varied significantly when

correlated with years of service within the organization. The pattern of organizational commitment research methodology through the 1970s was a “one sample, one study” methodology (Mowday et al., 1979).

Even with published organizational commitment studies, the lack of definition for commitment invited several threats to the validity of each study. The most influential and subsequently most cited academic publication from the 1970s on organizational commitment is Mowday et al.’s (1979) “The Measurement of Organizational Commitment.” Mowday et al. found the lack of consistency in the concept of commitment and in the measurement of commitment. Before Mowday et al., most published research on the topic of organizational commitment consisted of “two- to four-item scales that [were] created on an *a priori* basis and for which little or no validity and reliability data [was] represented” (p. 227). Thus, the goal of Mowday et al. was the creation of a valid instrument.

Behavioral vs. Attitudinal Commitment

Mowday et al. (1979, 1982) reviewed the definitions of organizational commitment and found two streams of literature forming: one rooted in behavior, the other rooted in attitude. The behavioral approach refers to commitment-related behavior. If one speaks of being “bound by his actions’ ...we are in effect focusing on overt manifestations of commitment” (Mowday et al., 1979). In other words, if there is no behavior, there is no commitment. Related to Becker’s “side bet” theory discussed above, this literature stream explains commitment as a construct a) only existing when a behavioral manifestation was concurrent with commitment, and b) identifying behavior as the primary factor that continued commitment. The more an employee acts in a

specific direction, the more it is seen as a kind of investment. For this investment, the investor wants a return (hence, Becker's side bet). Seeking that return on the investment is the basis of the continuation and intensification of an employee's continued action. It becomes an ongoing cycle of behavior and commitment.

The second stream of literature focused on defining commitment in terms of an attitude. Commitment became conceptualized as "a state in which an individual identifies with a particular organization and its goals" (Mowday et al., 1979, p. 225). In this stream of literature, commitment is the desire to stay with an organization so an employee can participate in facilitating and accomplishing the goals of the organization. An additional element of attitudinal commitment noted by Mowday et al. (1982) often included an "exchange relationship" in which employee commitment seeks rewards or payments in exchange for continued attachment to the organization. Mowday et al. (1979, 1982) noted clearly their primary concerns are the attitudinal approach and the related measurement of commitment.

Mowday et al. (1982) defined commitment as "the relative strength of an individual's identification with and involvement in a particular organization" (p. 226). The authors added commitment may be characterized by three primary factors: "(1) strong belief in and acceptance of the organization's goals and values; (2) willingness to exert considerable effort on behalf of the organization; and (3) strong desire to maintain membership in the organization" (Mowday et al., 1979, p. 226). In their definition, Mowday et al. (1982) went on to distinguish organizational commitment from job satisfaction. While daily events may impact an employee's level of job satisfaction,

daily events should not impact organizational commitment. In the attitudinal stream, commitment develops more slowly and consistently over time (Mowday et al., 1982).

Mowday et al.'s Approach to Measurement

Until Mowday et al. (1979), organizational commitment literature was searching for a definition of organizational commitment as well as a valid way of measurement. As a result, validity issues proliferated. With previous research relying only on face validity, Mowday et al. (1979) developed an instrument based on the definition of commitment. Mowday et al. (1982) went on to identify 15 correlated items, with the three defined components of commitment using a 7-point Likert scale with questions, including some stated positively and normally scored and some stated negatively and reverse scored. Mowday et al. (1982) titled this instrument, Organizational Commitment Questionnaire (OCQ).

The instrument was administered to 2,563 employees in nine different organizations. The work fields included public employees, blue collar university employees, hospital employees, bank employees, telephone company employees, scientists, engineers, auto company managers, psychiatric mechanics, and retail management trainees. Data analysis confirmed internal consistency reliability, test-retest reliability, convergent validity, discriminant validity, and predictive validity (Mowday et al., 1979). Predictive validity in organizational commitment research was new to the literature stream.

Three Component Commitment Model Articulated: 1980s

During the 1980s, use of the OCQ dominated organizational commitment research (Cooke, 1989). A few examples include Holy Wise's study of organizational

commitment among physical therapists (Wise, 1984), organizational identification among alumni (Mael, 1988), faculty commitment (Harshbarger, 1989), commitment in non-profit settings (Davis, 1981), part-time employees (Welsh, 1988), managers in public entities (Countee, 1988), and the Louisiana Cooperative Extension Service. (Carter, 1989)

However, stemming back to Mowday et al. (1979), the definition of organizational commitment as having three components lacked validity questions, and consequently the consensus for the definition of organizational commitment was questioned. Donna Cooke's (1989) dissertation addressed the validity of the three component model and the lack of consensus for a definition for organizational commitment. In her statement of purpose, she argued, "the OCQ has poor discriminant validity, vis-à-vis measures of job satisfaction and behavioral intentions to withdraw from the employing organization, and...is bidimensional (and not unidimensional), reflecting two underlying dimensions of instrumental and normative bases of commitment" (Cooke, 1989, p. 5). Cooke further challenged the validity of the instrument, noting that because of the bi-dimensionality of the understanding of commitment, the separate dimensions also have separate antecedents and consequences. While the OCQ was useful, Mowday et al. (1979) developed an instrument based on a definition of commitment in a pre-consensus phase of the academic literature. The problem of the lack of consensus on the definition of organizational commitment remained.

Cooke was not the first to identify and address the problem of a lack of a consensus definition of organizational commitment. In 1984, Meyer and Allen introduced the language of 'affective commitment' (i.e., emotional attachment) and

‘continuance commitment’ (Becker’s ‘side bet’ approach) into the literature (Meyer & Allen, 1984). They conducted two studies showing an employee could demonstrate high levels of either type of commitment, affective or continuance. In 1985, Allen published her dissertation with the three-fold or three-factor commitment model in the form it still takes today.

Allen (1985) tackled the problem of defining organizational commitment using a consensus approach. Using a review of literature, the author defined three streams of literature attempting to define commitment, and declared the combination of research consensus to be the definition of organization commitment. Organizational commitment as defined by Allen’s consensus is composed of three components, as seen in three approaches explored below.

Organizational/Attitudinal Approach

The organizational/attitudinal approach explains commitment in terms of an employee’s identification with and emotional bond to the company (or any other entity under consideration). The organizational/attitudinal approach is specifically not behavioral, but rather attitudinal and mental/emotional. The mental and emotional commitment is pointed and attached to the organization’s values and goals (Allen, 1985). Allen includes in this stream researchers referring to “cohesion commitment” (Buchanan, 1974).

Behavioral Consistency/Social Psychological Approach

From a lens that intentionally ignores affect, researchers in the behavioral consistency stream of literature view commitment only in behavioral terms. In this so-called “continuance” approach (Allen, 1985), the evidence of commitment is continued similar behavior. For example, Kiesler and Sakumura (1966) defined commitment as “the pledging or binding of an individual to behavioral acts” (p. 349). Their continuance approach is similar to Becker’s ‘side bet’ approach to commitment. The focus of continuance commitment is on the costs of leaving the organization, or of reversing a course of action one has previously committed.

Moral/Normative Approach

For Allen (1985), the moral/normative stream of literature represented a morality-based commitment. It found feelings of moral obligation motivated and enforced commitment. Allen cited Etzioni (1975) and Weiner (1982) as the primary authors in the moral/normative literature. The moral/normative literature is much less represented within the overall body of commitment literature. Allen (1985) noted, however, that organizational commitment with a moral or obligation component was under-researched generally and she views this approach with the most promise for fruitful research.

Impact of a Three Component Paradigm

Allen (1985) introduced three new components of organizational commitment that became the foundational research for the next 30 years. Allen introduced specific language associated with each of the three categories. Allen associated affective commitment with the employee who “wants to” contribute to the organization’s goals and values. Continuance commitment was associated with the employee who “has to” (later,

“needs to”) contribute to the goals of the organization. Finally, normative commitment was associated with the employee who is committed because they feel they “ought to” contribute to the organization (Allen, 1985). By 1990, Allen changed the continuance commitment language from “has to” to “needs to” (Allen & Meyer, 1990).

This change in language is subtle but very significant with regard to the behavioral vs. attitudinal approaches. Using this language, “has to” or “needs to” can be understood as attitudinal. By using this language, all three components can be understood in a way that allows commitment to be thought of more easily as three components of a single, motivational construct. It removes the requirement of actual behavior and, therefore, moves the discussion out of the behavioral stream for understanding organizational commitment. Allen (1985) commented, “...attitudinal commitment refers to an individual’s emotional attachment to the organization. Behavioral commitment, however, refers to the employee’s intention to stay with the organization” (p. 6). Intention and behavior are decidedly different. Intent is not part of Becker’s side bet, the latter of which is purely behavioral. The shift is from seeing behavior first followed by an interpretation of the value of the behavior, to behavior followed by an interpretation followed by more behavior. Put differently, the intent of the continuing behavior is the same as the interpretation of the previous behavior. This seemingly minor shift allows for the entire discussion of organizational commitment to shift in the direction of the attitudinal approach.

Search for Valid Antecedent and Outcome Variables: 1990s

The clarification of a three component model of organizational commitment as a single, attitudinal construct with three separate components set the stage for expanding

the model to include antecedents and outcomes. Mathieu and Zajac (1990) summarized all previously published analyses of organizational commitment including some version of antecedents, including personal characteristics, commitment components, and consequences. However, Mathieu and Zajac (1990) worked from a definition of commitment as having only two components: “attitudinal” and “calculative.” In their approach, attitudinal roughly equates to affective commitment, while calculative equates to continuance commitment. With little explanation, Mathieu and Zajac (1990, p. 172) dismissed normative commitment as not actually commitment. This article serves as a very good example of why consensus on a definition of organizational commitment is so critical. What could have contributed to the ongoing conversation was largely lost because Mathieu and Zajac (1990) worked from the wrong definition, namely the behavior-only definition.

Allen and Meyer (1990) and Meyer and Allen (1991) developed an instrument using the three component organizational commitment model. The authors developed a survey instrument instead of only conceptual categories. Meyer and Allen (1991) combined the OCQ with several dozen additional survey questions, each separately aligned with either desire, cost, or obligation, the components of the three component model.

Various researchers added research on the antecedents of each component, referring to the experiences and dynamics that promoted or caused the experience of desire, cost, or obligation in an employee. The researchers’ understanding of the antecedents were added as follows: the antecedents for desire included personal characteristics, job characteristics, work experiences, and structural characteristics (Allen

& Meyer, 1990; Mowday et al., 1982). The antecedents for cost were the magnitude or number of investments (Becker's side bets) and a perceived abundance or lack of other alternatives for work outside the organization (Allen & Meyer, 1990). The antecedents for obligation were employees' socialization experiences both prior to and following entry into the organization. In particular, it was proposed that any organization which openly expects loyalty from employees would have stronger obligation in it in general (Allen & Meyer, 1990).

The relevance of the debate of antecedents to desire, cost, and obligation is in part because of its implications on the definition of commitment. Either organizational commitment is a single construct with three components, or organizational commitment is a collection of three separate constructs. If desire, cost, and obligation each have separate antecedents and separate outcomes, it would have been more logical to consider the three organizational commitment components as separate constructs (Meyer & Allen, 1991).

Further research in the 1990s distinct from Meyer and colleagues tended to regress to a two component model (Mathieu & Zajac, 1990; Mayer & Schoorman, 1998). As a primary discussion was forming around the three component model, other attempts were made to revisit the definition of organizational commitment. Mayer and Schoorman (1998) attempted to reclaim a publication from 1958 (March & Simon, 1958) as a reference point yet again disregarding obligation as a component, even though multiple publications verified obligation as a legitimate organizational commitment component.

Additional research focused on commitment outside of organizational commitment. Other commitment-focus studies included focus on occupational

commitment (Meyer, Allen, & Smith, 1993), union commitment (Friedman & Harvey, 1986; Gordon, Phipot, Burt, Thompson, & Spiller, 1980), and commitment to manager and work team (Becker, 1992; Becker & Billings, 1996; Hunt & Morgan, 1994). The conceptualization of commitment in each of these studies simply relocates the focus of commitment from the employing organization to another entity or construct, but maintains the integrity of the three component model. Conclusions about organizational commitment were generalized into other forms of commitment (Meyer & Herscovitch, 2001), which created as much confusion as progress. Meanwhile, Meyer and colleagues continued to build the foundation for the three component model (Allen & Meyer, 1990; 1993, 1996; Meyer et al., 1993; Meyer & Allen, 1991; Meyer, Gemmell, & Irving, 1997; Tett & Meyer, 1993).

Establishing a More Complete Theoretical Organizational Commitment Model

In a shift following a decade of establishing and embedding the three component organizational commitment model in the literature, research expanded to answer two additional questions: the first pertained to the “core essence” of commitment encompassing all three components (Meyer, Stanley, & Vandenberg, 2013). The second focused on how researchers should view various degrees or intensities of commitment among employees in a research population (Meyer, Stanley, et al., 2013). Alongside these two questions, it is important to inquire whether previous attempts at analysis have assumed too much uniformity among the commitment levels of the research population. In likely the most anchoring article for the entire history of the conversation, Meyer and Herscovitch (2001) focused on the issues representing the core essence of organizational commitment and varying degrees of intensity levels of desire, cost, and obligation.

Expanded Theoretical Considerations

One of the fundamental points Meyer (2014) has argued throughout the development of the three component model is that the definition of organizational commitment must remain consistent; otherwise, the value as an explanatory concept is lost. Meyer and Herscovitch (2001) argued for the definition of organizational commitment to remain consistent across all organizational commitment research to ensure consistency across all behavioral research.

The lasting contributions to the academic discussion of commitment from Meyer and Herscovitch (2001) are several. The authors argued that the mindset composing organizational commitment can take different forms. These forms, or perspectives, are composed of the three commitment components: desire, cost, and obligation. The strength of each person's commitment mindset can be measured, and when combined, compose an employee's "commitment profile" (Meyer & Herscovitch, 2001).

Additionally, Meyer and Herscovitch argued that all organizational commitment has a target, sometimes an explicit target, sometimes implied. The target can be a specific and recognizable entity, an abstract concept, like mercy, winning, or loyalty, or some other intended outcome of a course of action (Meyer & Herscovitch, 2001). Therefore, the overall organizational commitment mind-set includes the commitment components, a course of action, and a target outcome (Meyer & Herscovitch, 2001). The authors went on to state, "Prediction of behavior...will be more accurate when the measure of [organizational] commitment reflects both the behavior and the target such as staying with the organization or exerting effort toward the attainment of a goal" (Meyer & Herscovitch, 2001, p. 312).

Meyer and Herscovitch (2001) theorized that all three organizational commitment mindsets (desire, cost, and obligation) will have a positive relationship with a given focal behavior, such as reduced turnover, with desire showing the strongest relationship. The authors also argued that the differences in the strength of relationship between the three organizational commitment components and discretionary effort will be stronger than with focal behaviors, with desire being the strongest, followed by obligation (Meyer & Herscovitch, 2001). With regard to discretionary behaviors, Meyer and Herscovitch contended that cost does not have a positive relationship with discretionary effort, and may result in a negative relationship.

Meyer and Herscovitch (2001) additionally postulated predictions about organizational commitment components when combined and their relationship with focal behaviors. The eight different organizational commitment combinations are identified in Table 1 as follows:

Table 1

Eight Possible Commitment Component Intensity Combinations

Commitment Type	Intensity Levels							
Desire	High	High	High	High	Low	Low	Low	Low
Obligation	High	High	Low	Low	High	High	Low	Low
Cost	High	Low	High	Low	High	Low	High	Low

Meyer and Herscovitch (2001) argued that the influence of any separate organizational commitment component (desire, cost, or obligation) will be greatest when other organizational commitment components when combined are individually low. For example, high levels of desire would yield higher levels of discretionary effort when

combined with low levels of cost and obligation. Conversely, if the desire component is present at a high level but is combined with high cost and obligation, the discretionary effort yielded will be not as high as desire alone. Meyer and Herscovitch (2001) argued that the same would be true of cost along and obligation alone.

Finally, Meyer and Herscovitch (2001) postulated a theory of the antecedents of organizational commitment. When “an individual becomes involved in, recognizes the value-relevance of, and/or derives his or her identity from association with the organization or with a specific course of action” (Meyer & Herscovitch, 2001, p. 300), desire will develop from it. The mindset of cost as a component of organizational commitment develops when an employee “recognizes that he or she stands to lose investments, and/or perceives...there are no alternatives other than to pursue a course of action of relevance to a particular target” (Meyer & Herscovitch, 2001, p. 300). The mindset of obligation develops as a result of “the internalization of norms through socialization, the receipt of benefits that induces a need to reciprocate and/or acceptance of the terms of the psychological contract” (Meyer & Herscovitch, 2001, p. 300).

Organizational Commitment in Current Studies

A number of recent studies using the three component organizational commitment model have been conducted internationally. Populations for these studies include the Canadian military (Meyer, Kam, Goldenberg, & Bremner, 2013), the financial sector in India (Kaur & Sharma, 2015), medium-sized organizations in Lebanon (Nasr, 2012), and institutions of higher education in Pakistan (Maqsood, Hanif, Rehman, & Glenn, 2012). Several similar U.S. studies of organizational commitment include a study of how previous work experiences affect hourly employees (Bartocci, 2012), an examination of

the relationship between higher levels of faculty trust in a high school principal and higher levels of organizational commitment (Abston, 2015), and a study of the causal relationship perceived organizational support and organizational commitment in police officers (Johnson, 2012). The review of related literature revealed more research on validations of the three component organizational commitment model than organizational commitment theoretical advancements.

One study of the antecedents of the three commitment components needs to be discussed. Meyer et al. (2002) studied the relationship between theoretical antecedents of each of the components. They theorized that possible antecedents of the commitment component desire may be personal characteristics (age, geography, gender, etc.) and work experiences (organizational tenure and position tenure). Possible antecedents of the commitment component cost included the same personal characteristics, side bet investments (Becker, 1960), and the availability of other alternative places to work. Possible antecedents of obligation included the same personal characteristics, socialization experiences, and organizational support.

One finding is relevant to this study. In their findings, there is a correlation between available alternative places to work and the commitment component cost. This current study was conducted in a milieu of a workforce gap, a context in which there are more available jobs than available talent. Therefore, a proven relationship between available alternatives and the commitment component cost is relevant.

With each antecedent, the human motivation generated is not defined by its components. Similar to the way the definition of commitment was taken as obvious before Becker (1960), each antecedent above is viewed as motivational, but the definition

of motivation is taken as obvious. Understanding organizational commitment requires an understanding of SDT, a prevailing theory of human motivation.

Self-Determination Theory of Motivation

Self-Determination Theory, developed first by Edward Deci and Richard Ryan, is a meta-theory of human motivation that provides a broad framework for the study of human behavior, motivation, and personality (Deci, 2018). This theory is rooted in the notion that human beings have three central psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 2012). To the degree these needs are met, human beings experience psychological growth, wholeness, and wellness; to the degree these needs are not met, dysfunction and brokenness ensue (Deci & Ryan, 2012).

Psychological Needs

In the history of psychology, a number of theorists assumed as properly basic that human beings are fundamentally driven to grow toward integration (Ryan, 1995). The different psychological constructs have taken various forms: Freud's synthetic function of the ego (Freud, 1923), Jung's individuation (Jung, 1951), Rogers' actualizing tendency (Rogers, 1961), Piaget's organization (Piaget, 1971), and Werner's orthogenetic principle (Werner, 1948) are all examples. The constructs are very different in the details (Ryan, 1995). The point of this argument is that all of the constructs assume humans have inherent predispositions to assimilate and integrate within the psyche (Ryan, 1995). The pathway to that integration is through the meeting of three psychological needs (Ryan, 1995).

According to SDT, those three psychological needs are autonomy, competence, and relatedness (Deci & Ryan, 2012). In Deci and Ryan's view, there is not an inner

trigger or resource that responds to these three provocations; rather, these three experiences are the most fundamental needs of the human psyche (Deci & Ryan, 2012). For Deci and Ryan there is nothing more basic to the psyche (Deci & Ryan, 2012). As a theory of motivation, therefore, this concept of the psychological need for autonomy, competence, and relatedness is the explanation of the source of the energization of the behavior (Deci & Ryan, 2012).

Autonomy

One of the central pathways toward integration Deci and Ryan (2012) have addressed is movement away from forced or unwanted behavior and toward behavior with which one concurs with and fully endorses. Autonomy is the “capacity for and desire to experience self-regulation and integrity” (Deci & Ryan, 2012). In SDT, autonomy is understood as “a central force...toward greater freedom and voice for citizens within cultures and governments” (Deci & Ryan, 2012). As human beings grow in healthy ways, they move in the direction of greater autonomy (Deci, 2018). In part, this means they increasingly internalize external regulations and requirements and begin to experience their interaction with the outside world as being in harmony with their own behavior, resulting in increasing capacity to effectively manage inner drives and emotions (Deci & Ryan, 2012).

Extrinsic vs. Intrinsic Motivations

For Deci, Ryan, and other STD proponents, the type of motivation explains the energization of behavior, not an amount of motivation (Deci & Ryan, 2008). This point is particularly important for a proper understanding of autonomy (Deci & Ryan, 2012). Intrinsic motivation occurs when an employee proactively initiates engagement with

activities in the environment around them (Deci & Ryan, 2012). When one engages their external environment simply out of an inner desire to do so, intrinsic motivation is the energizing factor leading to that behavior (Deci & Ryan, 2012). As young children, intrinsic motivations are driven primarily by inner urges and base desires, but later begin to experience external expectations and regulations. However, as humans grow and mature in healthy directions, growth includes the integration of those expectations become part of the proactive orientation of the employee (Deci & Ryan, 1980).

By contrast, extrinsic motivation is action taken in the pursuit of specific rewards or to avoid specific punishments (Deci & Ryan, 2012). In SDT, external regulation is action toward another in which an attempt is made to control the other's behavior by using specific rewards and punishments (Deci & Ryan, 2012). When another employee's behavior is driven by external regulation and not integrated into the employee, the need for autonomy is unmet. That employee's path of development is not able to integrate toward wholeness (Deci, 2018). However, Deci, Connell, and Ryan (1989) demonstrated that when an employee perceives the relationships around them to be supportive, that employee will naturally begin to integrate and internalize externally regulated behaviors. The role of the need for relatedness as a regulating factor in internalizing external expectations and regulations is, therefore, highly significant (Deci & Ryan, 2012).

Competence

Employee competence is a measure of a person's capacity to alter something in their external environment in ways they intend and are motivated to alter it (Deci, 2018). As such, competence is an important regulator on one's perceived autonomy. As with

relatedness, feeling competent is a basic need, but also regulates perceived autonomy (Deci, 2018).

Relatedness

Relatedness, as a basic psychological need, is the development and maintenance of human relationships, close personal relationships such as best friends and romantic partners, as well as identification with groups such as a department in a company or a sports team's fan base (Deci, 2018). Relationships play a key role in mediating the meeting or not meeting of psychological needs (Deci & Ryan, 2012). Not surprisingly, one's relationships meet the relatedness need to the degree in which they support one's autonomy, competence, and relatedness (Deci, 2018).

Discretionary Effort

Discretionary effort is voluntary effort directed toward organizational objectives above the minimum effort required (Shuck, 2010; Lloyd, 2008; Merriman, Glariana, & Bernardi, 2012). This additional effort might take the form of working longer hours, persistence in completion of a project, or acting with consistency in the face of changing circumstances. A proven relationship is indicated between an employee's increased levels of discretionary effort and a higher quality work product (Lloyd, 2008; Mackay, 2016).

Frenkel, Restubog, and Bednall (2012) studied the relationship between perceived organizational support, an employee's identification with the organization, and discretionary effort in a large, alcoholic beverage firm. Frenkel et al. (2012) found a positive correlation between an employee identifying with the organization and higher levels of discretionary effort. Similarly, Merriman et al. (2012) found having a goal

orientation, which is similar to desire, had a positive relationship with task performance, documenting goal orientation generated discretionary effort.

Intent to Turnover

Intent to turnover is an employee's intent to leave or not leave the company for which they currently work voluntarily (Shuck, 2010). High turnover intent means the employee intends to leave the company, while low turnover intent reflects the employee does not intend to leave the company (Morin et al., 2015). Throughout this study, intent to turnover referred only to the employee's intent to voluntarily leave and does not refer to being laid off or terminated. As of the end of August 2017, the total number of separations in the U.S. workforce was 5.2 million (United States Department of Labor, 2019b). However, the number of employees that voluntarily quit is 3.1 million (United States Department of Labor, 2019b).

The financial cost of turnover is generally accepted, but turnover is not always fully monetized; turnover cost calculations average 20.7% for all types of employees (Boushey, 2012). The median gross wage for all employees in the U.S. in the third quarter of 2017 was \$868, or \$45,136 annualized (United States Department of Labor, 2019b). By performing a few simple calculations, the total annual wages for the 3.1 million employees who quit their jobs in August 2017 amounted to \$139.9 trillion dollars. If the cost of turnover is 20.7% of annual wages, the total burden to the U.S. economy of voluntary turnover in August 2017 alone was \$28.96 billion (Boushey, 2012).

Summary

Organizational commitment is the psychological and emotional attachment of an employee or workforce to the organization for which they work. This review of literature detailed the history of organizational commitment research from the 1960s to the formation of the three component organizational commitment model. The three component organizational commitment model includes not only the three components (desire, cost, and obligation), but also an understanding of its antecedents and outcomes. Chapter III presents the research design and methodology for this study.

CHAPTER III – RESEARCH DESIGN AND METHODOLOGY

A workforce with high levels of organizational commitment (desire, cost, and obligation) may minimize the cost of turnover and maximize productivity through increased discretionary effort and reduced intent to turnover (Carnevale & Smith, 2017). Without continuing to add to the base of knowledge about organizational commitment, these financial costs continue year after year (Nasr, 2012). A review of the literature has presented the framework of organizational commitment and relevance of the current workforce gap.

The purpose of this study was to determine the perceived relationship between the three components of organizational commitment with discretionary effort and intent to turnover. This study focused on the relationship of a group of mechanics' organizational commitment with their perceived (a) discretionary effort and (b) intent to leave the organization.

Research Objectives

Based on a review of the current literature, five research objectives guided this study. The objectives focused on determining the relationship between the three organizational commitment components (desire, cost, and obligation) individually, discretionary effort, and intent to turnover; and determining the relationship between the commitment components (desire, cost, and obligation) combined, discretionary effort, and intent to turnover. The research objectives were as follows:

RO1: Describe the demographic characteristics of the population in terms of work location, work context, and years of service.

RO2: Determine the relationship between perceived discretionary effort and perceived organizational commitment components: desire, cost, and obligation separately.

RO3: Determine the relationship between perceived intent to turnover and perceived organizational commitment components: desire, cost, and obligation separately.

RO4: Determine the relationship between perceived discretionary effort and perceived employee organizational commitment components: desire, cost, and obligation combined.

RO5: Determine the relationship between perceived intent to turnover and perceived employee organizational commitment components: desire, cost, and obligation combined.

Research Design

This study was a non-experimental, explanatory, quantitative, cross-sectional study of organizational commitment among air conditioning mechanics. Quantitative survey data was collected on paper surveys at the job sites of a census of air conditioning mechanics. The research objectives of this study were addressed by a cross-sectional, explanatory, non-experimental research design (Shadish, Cook, & Campbell, 2002). A study is cross-sectional when data is gathered at a fixed point in time as opposed to over a period of time (Fink, 2003). The purpose of explanatory design is to clarify the relationship between various variables or constructs within the research population (Shadish et al., 2002). Quantitative research design is most commonly either experimental or non-experimental (Creswell, 2003). Non-experimental studies that

describe and explain what is found in the population, but no manipulation of variables is involved (Shadish et al., 2002). The research objectives for this study did not require intervention or manipulation of variables or longitudinal study. The cause and effect relationship between the components of commitment, intent to turnover, and discretionary effort was beyond the scope of this study. Questions on the survey assessed the types and degrees of organizational commitment, and other questions assessed levels of discretionary effort and intent to turnover for the respondents.

Population

The population for this study was air conditioning mechanics at a small company in the southeast. Air conditioning mechanics present a reliable representation of employees currently experiencing a workforce gap: Their type of talent is in demand talent for which other firms are competing (The Associated General Contractors of America, 2016). Air conditioning mechanics are employees who directly interface with air conditioning units for repair, maintenance, and installation.

The initial population for this study was all air conditioning mechanics of a single air conditioning company with five locations. Each location is managed independently by a general manager. The managers and mechanics of each location do not routinely interact. This regional company has offices in Houston, Texas ($n = 71$); Baton Rouge, Louisiana ($n = 91$); New Orleans, Louisiana ($n = 49$); Jackson, Mississippi ($n = 24$); and Mobile, Alabama ($n = 25$). Permission to survey the mechanics was granted by the company ownership (see Appendix A).

Between the time permission was initially given and the time of data collection, the researcher was informed of active negotiations with an outside firm to purchase the

Jackson and Mobile locations. Because of this distraction in the organization, the general managers of the Jackson and Mobile locations chose not to participate in the study.

Consequently, Jackson and Mobile were removed from the population, leaving Houston, New Orleans, and Baton Rouge ($N = 211$) as the proposed population for the study.

Census

One of the values of social science research is the ability to study particular units, apply treatments, and make valid generalizations to larger groups with accuracy (Shadish et al., 2002). This includes the ability to make accurate generalizations to identical units from the same population as well as to persons, settings, treatments, and outcomes with variation involved (Shadish et al., 2002). This is commonly achieved using random sampling from a population (Fink, 2003).

However, generalizing to a larger population was not appropriate for the design of this study. The objectives of this study were designed to determine the relationships between the three components of organizational commitment (desire, cost, and obligation) to discretionary effort and intent to turnover for air conditioning mechanics within the same population. Sampling was not appropriate because the entire population of the company were available, therefore, the chosen methodology was a census rather than a sampling. A census is a survey in which all the objects or people within a population are observed (Fink, 2003). Participants ($N = 211$) constituted a single census with an attempted enumeration of the all the air conditioning mechanics in the company (Shadish et al., 2002). Because the survey was given to a census, no analysis of sampling procedures was required.

Census Error

Census error occurs when every member of a population is not properly surveyed (Bell & Cohen, 2007). Because the goal of the census is to survey every person in a population, census errors are ways in which that goal is unfulfilled. The degree all people in a census have been surveyed is known as coverage (Bell and Cohen, 2007). Three coverage errors were relevant to this study: (a) the inclusion of people who should not have been included, (b) the omission of people who should have been included, and (c) the repeat inclusion of the same people (Bell & Cohen, 2007). In the U.S. Census, residences are tracked as having been surveyed or not, so omissions can be tracked and survey personnel can return to tend to that residence (Bell & Cohen, 2007). However, in this current study, survey responses were anonymous, so there was no method to follow up individually and fix coverage error.

For this population ($N = 211$), a minimum of 137 survey instruments were required for a 5% margin of error (Qualtrics, 2019). In this study, 151 surveys were collected. However, one survey was unusable because it was unclear what specific responses were being marked, resulting in a response of 150, exceeding the 137 minimum required for a 5% margin of error (Qualtrics, 2019). This resulted in a response rate of 71.0% and a coverage error rate of 29.0%.

Protection of Human Subjects

This study was approved by The University of Southern Mississippi Institutional Review Board (IRB; see Appendix B). The purpose of the IRB is to protect the safety and rights of people who participate in research at The University of Southern

Mississippi. Following approval of the IRB, the researcher followed the data collection plan approved by the researcher's committee.

Instrumentation

Studying organizational commitment in air conditioning mechanics requires collecting data. The analysis of data makes possible assessments, evaluations, and measurements of commitment components and commitment outcomes according to the research objectives of this study. The data collection instrument was central to this study because the data collection instrument and how it is used is the basis for the accuracy and trustworthiness of the data and conclusions of this study. The survey instrument for this study consisted of 31 questions: 4 demographic questions, 18 organizational commitment questions, 6 discretionary effort questions, and 3 intent to turnover questions (see Appendix C).

Participants responded to demographic questions using multiple choice questions for location, work context, and years of tenure. The remaining 27 survey questions offered response options on a 7-point Likert scale: *Strongly Disagree*, *Disagree*, *Slightly Disagree*, *Undecided*, *Slightly Agree*, *Agree*, and *Strongly Agree*.

Instrument Sources

The instrument for this study combined survey questions from three different sources. Questions related to the three components of organizational commitment (desire, cost, and obligation) were derived from questions from the Three Component Model of Employee Commitment Survey developed by Meyer and Allen (2004). Questions related to discretionary effort were derived from Rosemary Lloyd's (2008) Discretionary Effort Scale developed in her article "Discretionary Effort and the

Performance Domain.” Finally, questions regarding intent to turnover were derived from the Intention to Turnover Scale, a three-item scale developed by Stephen Colarelli (1948) in his article “Methods of Communication and Mediating Processes in Job Interviews.”

Three Component Model of Employee Commitment Survey

John Meyer and Natalie Allen developed the current model most commonly used in the academic literature for assessing and defining organizational commitment using the Three Component Model of Employee Commitment Survey (Allen, 1985; Meyer & Allen, 1991; Meyer & Allen, 2004). The Three Component Model of Employee Commitment Survey was developed by Meyer and Allen based on the three component model of organizational commitment they initially developed in the 1980s. This survey has been used in over 200 different studies with diverse study populations (Meyer & Allen, 2004). Using the Three Component Model of Employee Commitment Survey for this study aimed to add to the body of organizational commitment literature. The wording of the questions was kept identical.

Validity and Reliability of the Instrument

Data collection and analysis were at the heart of the work of this study, ensuring accurate results. Accurate data collection and analysis falls first on the validity and reliability of the research instrument (Trochim & Donnelly, 2008). The Three Component Model of Employee Commitment Survey (Meyer & Allen, 2004) was chosen, in part, because it is a validated instrument. Permission was granted for its use in this instrument (see Appendix D).

Construct Threat Addressed

Construct validity assesses whether the instrument utilized appropriately addresses the proper domain (Shadish et al., 2002). One threat to construct validity for the instrument used in this study was related to questions focusing on antecedents of organizational commitment rather than the occurrence of organizational commitment.

Historically, a first and a second version of the Three Component Model of Employee Commitment Survey exist because of a construct threat related to how obligation is addressed in the survey questions (Meyer & Allen, 2004). The original version asked questions more closely related to the perceived “sources” of obligation, not from the “occurrence” of obligation. In the revised version, survey questions related to obligation include a focus on feelings of obligation directly (Meyer & Allen, 2004). Not asking questions directly about obligation potentially adds a construct threat to the validity of this study. In addition, the revised version is a slightly shorter survey having six questions per commitment component instead of eight, making the survey potentially less threatening to participant. For both reasons, the instrument with six revised survey questions was selected for this study.

Choosing survey questions for the instrument for this study from other peer reviewed publications reduces validity and reliability threats in the survey instrument (Shuck, 2010). This same method of question selection and specifically these two scales is consistent with the literature, e.g., Brad Shuck’s (2010) study of engagement.

Reliability

Reliability relates to consistency, specifically to whether the instrument utilized will produce consistent results (Shadish et al., 2002). The reliability of the sources of the

questions in the instrument for this study motivated the researcher to choose survey instruments used previously in peer reviewed research.

A common practice in assessing reliability of The Three Component Organizational Commitment Survey in other studies is to see the instrument as three separate scales: The Affective Commitment Scale (Desire), The Continuance Commitment Scale (Cost), and The Normative Commitment Scale (Obligation). Therefore, each of the three scales has its own reliability scores. Reliability scores are reported as follows: in Allen and Meyer (1990), Affective Commitment Scale, .87; Continuance Commitment Scale, .75; and Normative Commitment Scale, .79. In Meyer and Allen's Model of Organizational Commitment (Jaros, 2007), reliability scores were Affective Commitment Scale, .85; Continuance Commitment Scale, .79; and Normative Commitment Scale, .73. For a third example, see Meyer et al. (2002), which had the following scores: Affective Commitment Scale, .82; Continuance Commitment Scale, .76; and Normative Commitment Scale, .73. Reliability scores in this current study were as follows: Affective Commitment Scale (Desire), .829; The Continuance Commitment Scale (Cost), .729; and The Normative Commitment Scale (Obligation), .789.

The Discretionary Effort Scale

Rosemarie Lloyd's (2008) Discretionary Effort and the Performance Domain studied managers to determine the relationship between discretionary effort and both performance issues and organizational citizenship behavior. All six questions from Lloyd's Discretionary Effort Scale were used in the survey instrument for this study of air conditioning mechanics. Wording from Lloyd's instrument was kept identical for this study. The questions were used with permission (see Appendix D).

Reliability of the Discretionary Effort Scale

Discretionary effort is measured in this study using the questions from the Discretionary Effort Scale (Lloyd, 2008). To establish validity, Lloyd (2008) used a sample of 476 respondents of managers from several different fields to determine the relationship between discretionary effort and several other performance-related behaviors, including organizational citizenship behaviors. The items examined in the survey represented both determination and levels of energy in efforts observed in behavior. Lloyd established validity using a three-factor hierarchical model with organizational citizenship behaviors and in-role behaviors as variables. Lloyd also used confirmatory factor analysis to determine discretionary effort was related to in-role behaviors ($a = .60, p < .000$) and organizational citizenship behaviors ($a = .60, p < .000$). Lloyd reported a coefficient alpha of .87 for the Discretionary Effort Scale, and is consistent with the literature documenting the Discretionary Effort Scale with a reported coefficient alpha of .93 (Shuck, 2010). In the current study, the Discretionary Effort Scale coefficient alpha was .770 ($a = .770$).

Intent to Turnover Scale

Stephen Colarelli's (1984) "Methods of Communication and Mediating Processes in Realistic Job Previews" studied the effect of realistic job previews on bank teller applicants. As with Lloyd, Colarelli published survey questions with in the form of the Intent to Turnover Scale. Three survey questions related to intent to turnover are in the survey instrument for this study for word. As with the previous instruments, reducing reliability threats motivated the researcher to select this scale for the intent to turnover

instrument for this study. Intent to Turnover Scale was used with permission (see Appendix D).

Reliability of the Intent to Turnover Scale

Reliability is related to whether a given instrument will produce the same result in a similar setting (Shadish et al., 2002). Maintaining the reliability of the instrument for this study was achieved by choosing survey instruments with already established reliability in peer reviewed research.

Intent to turnover questions in this instrument are derived from the Intention to Turnover Scale, which measures an employee's future intent to leave the organization (Colarelli, 1984). Colarelli (1984) studied 164 bank tellers to better understand the impact of realistic job previews during job interviews. Colarelli reported a coefficient alpha of .75. In another study using the Intention to Turnover Scale, Saks and Ashforth (1997) reported a coefficient alpha of .86. In Shuck's research (2010), the coefficient alpha was reported as .81 for the Intention to Turnover Scale. In this study, for the Intent to Turnover Scale coefficient alpha was .719 ($\alpha = .719$).

Survey Map

The survey map (see Table 2 below) of the instrument of this study aligns the research objectives of this study and questions included in the instrument. The list of survey questions appears in Appendix E.

Table 2

Survey Map Aligning Research Objectives and Survey Questions

Research Objective Number	Research Objective Described	Questions
RO1	Describe the demographic characteristics of the population in terms of work location, work context, and years of service.	Q1, Q2, Q3, Q4
RO2	Determine the relationship between perceived discretionary effort and perceived desire as a separate commitment component	Q5, Q6, Q7, Q8, Q9, Q10, Q23, Q24, Q25, Q26, Q27, Q28, Q29
RO2	Determine the relationship between perceived discretionary effort and perceived cost as a separate commitment component	Q11, Q12, Q13, Q14, Q15, Q16, Q23, Q24, Q25, Q26, Q27, Q28, Q29
RO2	Determine the relationship between perceived discretionary effort and perceived obligation as a separate commitment component	Q17, Q18, Q19, Q20, Q21, Q22, Q23, Q24, Q25, Q26, Q27, Q28, Q29
RO3	Determine the relationship between perceived intent to turnover and perceived desire as a separate commitment component	Q5, Q6, Q7, Q8, Q9, Q10, Q31, Q32, Q33
RO3	Determine the relationship between perceived intent to turnover and perceived cost as a separate commitment component	Q11, Q12, Q13, Q14, Q15, Q16, Q31, Q32, Q33
RO3	Determine the relationship between perceived intent to turnover and perceived obligation as a separate commitment component	Q17, Q18, Q19, Q20, Q21, Q22, Q23, Q31, Q32, Q33
RO4	Determine the perceived relationship between perceived discretionary effort and perceived organizational commitment components combined.	Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q21, Q22, Q23, Q24, Q25, Q26, Q27, Q28, Q29
RO5	Determine the perceived relationship between perceived intent to turnover and perceived organizational commitment components combined.	Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q21, Q22, Q31, Q32, Q33

Threats to the Validity of this Study

Anytime data is gathered for the purpose of drawing dependable conclusions, the validity of the study is critically important. A plethora of factors, many not directly related to the research process, could have rendered the results and conclusions of this study invalid (Shadish et al., 2002). Shadish et al. (2002) linked validity to the ability to rightly infer the results of data gathering to the conclusions made in the study. Those possible factors that could have caused inaccuracies in the data gathering for this study or in the conclusions of this study are threats to the validity of this study.

Shadish et al. (2002) identified four types of validity in their validity typology: (a) statistical conclusion validity, (b) internal validity, (c) construct validity, and (d) external validity. Statistical conclusion validity refers to the validity of any inferences made regarding the correlation or covariation between the treatment and outcome in the study (Shadish et al., 2002). The internal validity of an instrument is the relationship between the treatment and the outcome in the study is causal (Shadish et al., 2002). Construct validity is the degree a test measures what it intends to measure (Cronbach & Meehl, 1955). External validity is concerned with whether the conclusions of a study also apply to other people and groups (Shadish et al., 2002).

Statistical Conclusion Validity

A primary threat to statistical conclusion validity in this study was of extraneous variance in the experimental setting in which the air conditioning mechanics live and work (Shadish et al., 2002). While all participants in the census for the current study were air conditioning mechanics, they worked in three different locations and in different contexts. Some worked as nested employees in a plant, while others moved from place to

place in their truck throughout the day. Furthermore, each location had different managers with different supervisors who could create a different work experience. The research design for the current study addressed this threat to statistical conclusion validity by including demographic questions relative to the setting and city in which the participants work.

Internal Validity

Internal validity is the degree observed co-variation between two variables is a causal relationship (Shadish et al., 2002). An example in this study was whether an increase in desire causes an increase in discretionary effort. One threat to internal validity is ambiguous temporal precedence (Shadish et al., 2002). The threat of ambiguous temporal precedence occurs when two variables are clearly interacting with each other, but it may be unclear which variable is independent and which is dependent. For example, according to the three component theory, when desire is rated high, the result will be high discretionary effort. However, it may be possible discretionary effort has been generated by some other motivation and may in turn cause desire to increase. This threat is present because no questions on the scales gather data from mechanics on their perceived understanding of those causal relationships.

An example of a threat to the internal validity of the instrument for this study of air conditioning mechanics was accidentally introduced to the process when a prior version of the survey was printed for distribution. The questions in the instrument were not re-ordered, resulting in survey questions about the same area (discretionary effort, desire, etc.) being grouped together. While assessing the real impact of this was impossible, the threat must be noted.

Another threat to the internal validity of this study was history. For the history threat to internal validity, events concurrent with treatment could cause the effect (Shadish et al., 2002). While there was no treatment in this study, the context of the current workforce gap and the ongoing recruiting of these mechanics by other employers could have potentially skewed the results by changing the perceived cost of leaving the organization. The fact that perceived organizational commitment cost may be lower as a result of the workforce gap is not a threat directly. Lower cost would simply correspond to the expected effects on discretionary effort and intent to turnover. However, in organizational commitment theory, cost is based on perceived investment. If the workforce gap impacting mechanics altered perceived cost it could have changed the relationship between cost and discretionary effort and intent to turnover. Similarly, high desire could correlate with higher intent to turnover, again because of the large number of opportunities available. An actual historical threat occurred prior to data collection when the general managers of the Jackson and Mobile locations unexpectedly withdrew their participation because of the potential sale of the companies.

Content Validity. Content validity is the degree survey questions collectively address the three component commitment model, discretionary effort, and intent to turnover (Huck, 2012). In this study, content validity was addressed using the Meyer-Allen Three Component Commitment Model Employee Commitment Survey (Meyer & Allen, 2004). The survey questions in the instrument addressing discretionary effort and intent to turnover were drawn from the literature (Lloyd, 2008; Colarelli, 1984), and the use of specific scales is consistent with research by Brad Shuck (2010).

Construct Validity. Construct validity is the degree the sampling particulars of a given study accurately make inferences to the higher-order constructs they represent (Shadish et al., 2002). Reaction to an experimental situation is a threat in which the participants respond in part based on the situation in which the data is gathered (Shadish et al., 2002). The fact that mechanics answered questions related to the company for which they work could have skewed honest responses. In this study, no inferences are attempted to employees or organizations beyond the population studied. The research design for this study called for a census, not a sampling, so the data gathered was not subject to construct validity issues based on sampling.

External Validity. External validity is concerned with generalizing to another population. The ability to generalize to another population is not appropriate for the design of this study. The study group was a census, not a sample, and no inference was made to any population beyond the census studied.

Data Collection

This study collected data from air conditioning mechanics across three locations. Company ownership had given permission to survey the participants (see Appendix A). Consent to participate was obtained from respondents using the Consent to Participate in Survey Research form (see Appendix F). As outlined in this form, employees who consented to participate were placed into a pool for one of five incentives: \$100 gift cards to the store or restaurant of their choice as both motivation and appreciation for their participation (Dillman, 2014). In order to randomize the selection, the researcher used the coding number on each of the consent forms to identify mechanics with a number

between 1 and 151. A random number generator was used to select the five participants in view of a witness. Cards were distributed to the respective winning mechanics.

The owner of the participating company locations advised the general manager of each location in which the researcher was conducting research using a survey and requested assistance in the study. The owner recommended surveys be distributed at the monthly safety meetings. The safety meeting is a monthly meeting attended by air conditioning mechanics attend in one location. The researcher contacted each general manager to coordinate and confirm dates of the next safety meeting.

The survey instrument was distributed on paper. For the sake of ensuring confidentiality, every participant received their Consent to Participate in Survey Research form, which had been inserted into a white envelope, nine inches by twelve inches in size (Dillman, 2014). Likewise, every printed survey (three pages, stapled, and in landscape orientation) was placed into a manila-colored envelope, also nine inches by twelve inches in size (Dillman, 2014). The researcher used different colored envelopes to increase anonymity by avoiding the concern that someone may associate their anonymous survey responses with the consent form displaying their name. All documents were already inside the proper envelope at the time of distribution to each location.

Consent forms and surveys were counted out for each location and hand carried to each location. The researcher was present and provided instructions in Baton Rouge and Houston. When the surveys were distributed in New Orleans, the researcher was present via telephone and the operations manager distributed the documents. The researcher oriented the participants to the consent form and the survey, emphasizing participation was entirely voluntary and anonymous. Each participant received a white envelope and a

manila envelope. The consent form was inside the white envelope. The participants reviewed the consent form, signed, and placed the form back into the white envelope. After completing the consent form, participants removed the survey form from the manila envelope. Upon completion of the survey, the completed survey was returned to the manila envelope and sealed. The researcher collected the envelopes in Baton Rouge and Houston, and envelopes were collected by the operations manager in New Orleans. The New Orleans the consent forms and surveys were given to an administrative assistant who placed the surveys in a pre-addressed FedEx envelope and overnighted to the researcher's home.

After all documents were fully in the possession of the researcher, the researcher counted them. The researcher numbered each survey and each consent form with a black marker. One hundred and fifty-two consent forms, but only 151 surveys, were returned. It was unlikely a survey was lost; rather, one participant who agreed to participate changed his mind. The results of all documents were coded by converting Likert scale answers to numerical values. Data was entered into an Excel worksheet and analyzed using SPSS. Ordinal data was collected for Research Objective 1. Interval data was used for Objectives 2-5.

Summary

The researcher used a cross-sectional nonexperimental research design to accomplish the five research objectives of this study. The population for this study was air conditioning mechanics ($N = 211$) working for a small air conditioning maintenance company. Mechanics currently work in Houston, Baton Rouge, and New Orleans. Survey data were gathered using a survey composed of the Three Component Model of

Employee Commitment Survey (Meyer & Allen, 2017), Rosemary Lloyd's Discretionary Effort Scale (Lloyd, 2008), and Steven Colarelli's Intention to Turnover Scale (Colarelli, 1984). The University of Southern Mississippi IRB gave approval to execute this study. Chapter IV presents the results of this study.

CHAPTER IV – RESULTS

The purpose of this study was to determine the relationship of the three components of organizational commitment (desire, cost, and obligation) separately to discretionary effort and intent to turnover, and to determine the relationship of the three components of organizational commitment (desire, cost, and obligation) combined to discretionary effort and intent to turnover in a population of air conditioning mechanics. This chapter provides a review of the results from the quantitative analysis of the data collected from this census of air conditioning mechanics.

Research Objectives

RO1: Describe the demographic characteristics of the population in terms of work location, work context, and years of service.

RO2: Determine the relationship between perceived discretionary effort and perceived organizational commitment components: desire, cost, and obligation separately.

RO3: Determine the relationship between perceived intent to turnover and perceived organizational commitment components: desire, cost, and obligation separately.

RO4: Determine the relationship between perceived discretionary effort and perceived employee organizational commitment components: desire, cost, and obligation combined.

RO5: Determine the relationship between perceived intent to turnover and perceived employee organizational commitment components: desire, cost, and obligation combined.

Data Analysis

As shown in Table 3, the data analysis includes descriptive statistics for demographics in Research Objective 1. Research Objective 2 used Pearson’s Correlation Coefficient to determine the bivariate relationships between each of the three components (desire, cost, and obligation) with discretionary effort. Research Objective 3 used Pearson’s Correlations Coefficient to determine the bivariate relationship of the separate commitment components (desire, cost, and obligation) with intent to turnover. Research Objectives 4 and 5 used multiple linear regression to determine the combined and relative influence of the commitment components as independent variables to determine the relationship with discretionary effort (Research Objective 4) and intent to turnover (Research Objective 5).

Table 3

Analysis Plan for Collected Data in the Study

Research Objective	Data Collected	Type of Data	Data Analysis
RO1	Location	Ordinal	Frequency Distribution
	Work Context	Ordinal	Frequency Distribution
	Years of Experience	Ordinal	Frequency Distribution
	Years with Company	Ordinal	Frequency Distribution
RO2	Desire (separately)	Interval	Pearson Correlation
	Cost (separately)	Interval	Pearson Correlation
	Obligation (separately)	Interval	Pearson Correlation
	Discretionary Effort	Interval	

Table 3 (continued).

RO3	Desire (separately)	Interval	Pearson Correlation
	Cost (separately)	Interval	Pearson Correlation
	Obligation (separately)	Interval	Pearson Correlation
	Intent to Turnover	Interval	
RO4	Desire/Cost/Obligation Combined (IV)	Interval	Multiple Linear Regression
	Discretionary Effort (DV)	Interval	
RO5	Desire/Cost/Obligation Combined (IV)	Interval	Multiple Linear Regression
	Intent to Turnover (DV)	Interval	

Data Results

This non-experimental, explanatory, quantitative, cross-sectional study determined the relationship of the three commitment components (desire, cost, and obligation) with discretionary effort and intent to turnover. Air conditioning mechanics from Houston, Baton Rouge, and New Orleans ($N = 211$) were given a 31-question survey. The survey collected 150 responses regarding the three commitment components, discretionary effort and intent to turnover, yielding a response rate of 71%. Results are presented below.

Research Objective 1

Research Objective 1 described key demographics of the population: geographic location, work setting, years of experience in the industry, and years of experience with this company. Table 4 below displays the data collected from survey questions regarding demographics.

Mechanics participating in this study live and work in Houston, Baton Rouge and New Orleans. A majority ($n = 85, 57\%$) of those responding to the survey are participants working from the Baton Rouge location. Both New Orleans and Baton Rouge reported a higher proportion of mechanics responding to the survey than Houston. Houston, as a metropolitan area, is much more geographically sprawling and experiences difficulty managing to have all mechanics in the office at one time. When combined the net coverage error for this census was 29%

Table 4

Work Location

Location	<i>N</i> by Location	Surveys Received	Coverage Error
Houston	71	19	73%
New Orleans	49	41	16%
Baton Rouge	91	85	7%
Did not answer		5	
Total	211	150	29%

The second demographic included in the survey regards the setting where the mechanics work. Approximately two thirds ($n = 103, 67\%$) of respondents self-identified as mobile. Mobile means the employee's normal work day begins driving directly to a work site, not to an office. Throughout the day, mobile respondents are contacted by telephone for instructions for the next job site. One out of three responded as nested mechanics ($n = 42, 28\%$), employees who begin their day driving to the same location every day and working at that site all day (see Table 5 below).

Table 5

Work Context

Nested vs. Mobile	<i>n</i>	Percent
Nested	42	28%
Mobile	103	67%
Did not answer	5	3%

Participant (*n* = 150) Nested vs. Mobile

Participants were asked about their years of experience in the field of air conditioning maintenance. Sixty-five percent (*n* = 98) of respondents reported more than ten years of experience in the industry, while 31% (*n* = 47) indicated less than 10 years of experience in air conditioning maintenance. Respondents were not given directions and how respond if they were exactly at 2 or 5 years of experience, which is reported as a potential limitation in describing the population (see Table 6).

Table 6

Years of Service

Years	<i>n</i>	Percent
1-2 years	14	9%
2-5 years	16	11%
5-10 years	17	11%
More than 10 years	98	65%
Did not answer	5	3%
Total	150	100%

Participant (*n* = 150) Years of Experience in Air Conditioning Maintenance

Table 7 below reports data collected regarding years of experience with the company locations. All mechanics in this study work for the same company, but at different locations. In terms of tenure with the company, the two most frequently reported groups are mechanics with 1-2 years of experience (*n* = 46, 31%) and those with over 10 years of experience at the company (*n* = 48, 32%). Respondents were not given

direction and how respond if they were exactly at 2 or 5 years of experience, which is a potential limitation for an accurate description of the study population.

Table 7

Years of Service with Company

Years	<i>n</i>	Percent
1-2 years	46	31%
2-5 years	25	17%
5-10 years	26	17%
More than 10 years	48	32%
Did not answer	5	3%
Total	150	100%

Participant (*n* = 150) Years of Experience with Company

Research Objective 2

Research Objective 2 determined the bivariate relationships between the separate components of commitment (desire, cost, and obligation) and discretionary effort. For this objective, each commitment component is examined without consideration of the intervening effects of the other components. The combined commitment components are analyzed with consideration of the effects of the separate commitment components in Research Objectives 4 and 5. For analysis for Research Objectives 2 and 3, Pearson’s Coefficient was calculated to determine the correlations. Descriptive statistics indicate the range and proportion of survey responses.

Ordinal responses to Likert scale survey responses were assigned numerical coding in order to determine a mean response for each survey for desire, cost, obligation, discretionary effort, and intent to turnover for each survey. Responses were coded numerically as follows: *Strongly Disagree – 1, Disagree – 2, Slightly Disagree – 3, Undecided – 4, Slightly Agree – 5, Agree – 6, Strongly Agree – 7*. Four questions were reverse scored (7, 8, 9, and 31). Pearson Coefficient was calculated using the mean

response for each commitment component (desire, cost, and obligation) and the mean response of either discretionary effort (Research Objective 2) or intent to turnover (Research Objective 3).

Pearson r

In statistical analysis, understanding the relationship between two qualitatively different constructs or variables in quantitative terms is commonly accomplished by calculating Pearson r . Pearson r is a coefficient based on the extent two different variables vary from their own average (Sprinthall, 2012). Correlation results using Pearson r take one of three forms: positive, negative, or zero (Sprinthall, 2012). Positive correlations exist when one variable has a high score and a second variable also has a high score, or when two variables have low scores. For example, if for a sample of executives, as their physical height increased so did their income, then Pearson r would yield a positive correlation between height and income. Negative correlations exist when high scores on one variable are associated with low scores in a corresponding second variable. For example, for a sample of students if the number of missed class sessions increased and grades or academic performance decreased, Pearson r would yield a negative correlation. Zero correlations exist if one variable is high but the second variable may be high or low with no related pattern. Pearson r coefficients always fall between -1 and 1 (Sprinthall, 2012). A Pearson r of 1 is the strongest possible positive correlation; a Pearson r of -1 is the strongest possible negative correlation; and a Pearson r of 0 is zero correlation (Sprinthall, 2012). As the Pearson r coefficient gets closer to 1 or -1 the correlation gets stronger, and as the Pearson r coefficient gets closer to 0 the correlation gets weaker.

The strength of the correlation relationships was interpreted using the scale developed by psychologist Joy Paul Guilford (Guilford, 1956). In Guilford’s scale (see Table 8 below), when Pearson’s r is less than .20 the correlation will be considered slight and almost negligible; when Pearson’s r is between .20 and less than .40 the correlation will be considered low, but with a small relationship; when Pearson’s r is between .40 and less than .70 the correlation will be considered moderate, with a substantial relationship. When the Pearson’s r is between .70 and less than .90 the correlation will be considered high, having a strong relationship; and when Pearson’s r is between .90 and 1.00 the correlation will be considered very high, with a very dependable relationship (Sprinthall, 2012). Guilford’s scale only applies when the correlation coefficient is significant (Sprinthall, 2012).

Table 8

Guilford’s Correlation Interpretations

<i>R</i> Value	Interpretation
Less than .20	Slight; almost negligible relationship
.20 to .40	Low correlation; definite but small relationship
.40 to .70	Moderate correlation; substantial relationship
.70 to .90	High correlation; marked relationship
.90 to 1.00	Very high correlation; very dependable relationship

Desire and Discretionary Effort

Desire is the “want to” component of commitment (Meyer & Allen, 1991). Responses to questions about desire clarified the degree of the respondent’s commitment to the company was based on wanting to work at that company. Table 9 below reports the results of a Pearson Coefficient (2-tailed) analysis to determine the relationship between desire and discretionary effort. The calculation shows a low correlation between

desire and discretionary effort ($r = .270$, $N = 150$, $p = .001$), indicating a definite, but small statistically significant relationship ($p = .001$) between desire as a commitment component and the determined level of discretionary effort. For mechanics responding to the organizational commitment survey, a definite but small relationship was determined between desire and discretionary effort.

Table 9

Coefficient Analysis of Desire and Discretionary Effort

Variables	Calculation	Desire	Discretionary Effort
Desire	Pearson Correlation	1	.270**
	Sig. (2-tailed)		.001
	<i>N</i>	150	150
Discretionary Effort	Pearson Correlation	.270**	1
	Sig. (2-tailed)	.001	
	<i>N</i>	150	150

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

Cost and Discretionary Effort

Cost is the “have to” commitment component (Meyer & Allen, 1991). Responses to questions about cost clarify the degree a mechanic continues to work at his company because he perceives the cost to leave his job is too great. Table 10 reports the results of a Pearson Coefficient (2-tailed) analysis to determine the relationship between cost and discretionary effort. While the correlation coefficient ($r = .070$) would indicate a slight correlation, the relationship is not statistically significant ($p = .398$). Therefore, no statistically significant relationship is reported between cost and discretionary effort ($r = .070$, $n = 150$, $p = .398$). A slight, almost negligible relationship was determined between cost and discretionary effort for this study of the three component model of organizational commitment.

Table 10

Coefficient Analysis of Cost and Discretionary Effort

Variable	Calculation	Cost	Discretionary Effort
Cost	Pearson Correlation	1	.070
	Sig. (2-tailed)		.398
	<i>N</i>	150	150
Discretionary Effort	Pearson Correlation	.070	1
	Sig. (2-tailed)	.398	
	<i>N</i>	150	150

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

Obligation and Discretionary Effort

Obligation is the “ought to” component of commitment (Meyer & Allen, 1991). Responses to questions about obligation clarify the degree feelings of loyalty or obligation to the company are the reason for that mechanic’s commitment to the company. Table 11 reports the results of a Pearson Coefficient (2-tailed) analysis to determine the relationship between obligation and discretionary effort. The calculation shows a low correlation between obligation and discretionary effort ($r = .289$, $n = 149$, $p < .001$). Responses to survey questions about obligation as a commitment component yielded a definite, small statistically significant relationship with survey responses about discretionary effort ($p < .001$), meaning obligation is correlated to discretionary effort. For the air conditioning mechanics responding to the survey a definite, small relationship was determined between the organizational commitment model component obligation and discretionary effort.

Table 11

Coefficient Analysis of Obligation and Discretionary Effort

Variable	Calculation	Obligation	Discretionary Effort
Obligation	Pearson Correlation	1	.289**
	Sig. (2-tailed)		.000
	N	149	149
Discretionary Effort	Pearson Correlation	.289**	1
	Sig. (2-tailed)	.000	
	N	149	150

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

Research Objective 3

Research Objective 3 determined the relationship between the separate components of commitment (desire, cost, and obligation) and intent to turnover. Intent to turnover is a measure of the mechanic's mindset about leaving the company. Higher intent to turnover scores suggest a mechanic strongly intends to leave the company; lower intent to turnover scores indicate the mechanic does not intend to leave.

As with Research Objective 2, a median was determined for desire, cost, and obligation for each commitment component by converting ordinal Likert scale responses to numerical coding of 1 through 7 and calculating a median for descriptive statistics. For analysis, a Pearson Correlation Coefficient was calculated using the mean response for each of the three commitment components (desire, cost, and obligation) and the mean of intent to turnover responses.

Desire and Intent to Turnover

Desire is the commitment component indicating the mechanic continues to work at their current company because they "want to." Responses to questions about desire clarify the extent the responding mechanics ($n = 150$) want to work at the company.

Table 12 reports the results of a Pearson Coefficient (2-tailed) analysis to determine the relationship between desire and intent to turnover. The calculation shows a moderate negative correlation between desire and intent to turnover ($r = -.665, n = 147, p < .001$). Responses to survey questions about desire as a commitment component indicate a statistically significant, substantial relationship with survey responses about intent to turnover, meaning desire is correlated with intent to turnover. A moderate, relationship was determined between the air conditioning mechanics reported organizational commitment component desire and intent to turnover.

Table 12

Coefficient Analysis of Desire and Intent to Turnover

Variable	Calculation	Desire	Intent to Turnover
Desire	Pearson Correlation	1	-.656**
	Sig. (2-tailed)		.000
	<i>N</i>	147	147
Intent to Turnover	Pearson Correlation	-.656**	1
	Sig. (2-tailed)	.000	
	<i>N</i>	147	147

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

Cost and Intent to Turnover

Cost is the commitment component measuring the degree a mechanic continues to work at this company because he perceives the costs to leave his job is too great. Table 13 reports the results of a Pearson Coefficient (2-tailed) analysis to determine the relationship between cost and intent to turnover. The correlation coefficient indicates a slight correlation ($r = .108, n = 147$), but the relationship is not statistically significant ($p = .193$). When determining the relationship of the organizational commitment model component cost with intent to turnover, no statistically significant relationship was found.

Table 13

Coefficient Analysis of Cost and Intent to Turnover

Variable	Calculation	Cost	Intent to Turnover
Cost	Pearson Correlation	1	.108
	Sig. (2-tailed)		.193
	<i>N</i>	147	147
Intent to Turnover	Pearson Correlation	.108	1
	Sig. (2-tailed)	.193	
	<i>N</i>	147	147

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

Obligation and Intent to Turnover

Obligation is the component of commitment clarifying the degree a mechanic is working at their company because of duty, loyalty, or a sense of responsibility. Table 14 reports the results of a Pearson Coefficient (2-tailed) analysis to determine the relationship between obligation and intent to turnover. The calculation shows a moderate, negative correlation between obligation and intent to turnover ($r = -.531$, $n = 147$, $p < .001$). Responses to survey questions about obligation as an organizational commitment component demonstrated a statistically significant, substantial relationship with survey responses about intent to turnover.

Table 14

Coefficient Analysis of Obligation and Intent to Turnover

Variable	Calculation	Obligation	Intent to Turnover
Obligation	Pearson Correlation	1	-.531**
	Sig. (2-tailed)		.000
	<i>N</i>	149	146
Intent to Turnover	Pearson Correlation	-.531**	1
	Sig. (2-tailed)	.000	
	<i>N</i>	146	147

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

Research Objective 4

Research Objective 4 determined the relationship between the commitment components (desire, cost, and obligation) combined to discretionary effort. In Research Objectives 2 and 3, each commitment component's relationship to discretionary effort and intent to turnover was considered separately, without the consideration of the effect of the other organizational commitment components. For Research Objective 4, the relationship of the commitment components was considered factoring the relationship of the other two components. For Research Objectives 4 and 5, a multiple linear regression analysis was calculated for all three commitment components as three independent variables. The purpose of the calculation was to determine the relationship between desire, cost, and obligation as independent variables with discretionary effort.

Linear Relationships and Homoscedasticity

Linear regression assumes a linear relationship exists between independent variables and dependent variables (Field, 2014). Homoscedasticity assumes in the same scatterplot, the shape formed is more similar to a tube than a cone. A cone forms when the error between the regression line and the actual data points increases or decreases disproportionately with the slope of the regression line (Sprinthall, 2012). A common way of assessing linearity and homoscedasticity is by simply looking at a scatterplot graph of the data. In Figures 2, 3, and 4 below, scatterplot graphs of desire, cost, and obligation with discretionary effort may be observed:

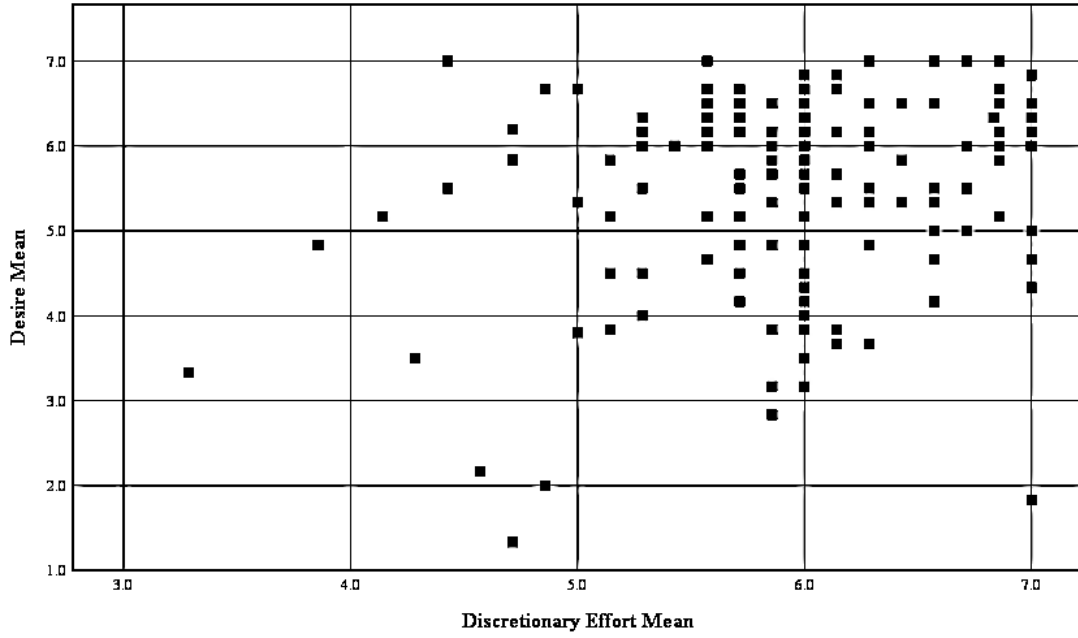


Figure 2. Scatterplot of desire and discretionary effort.

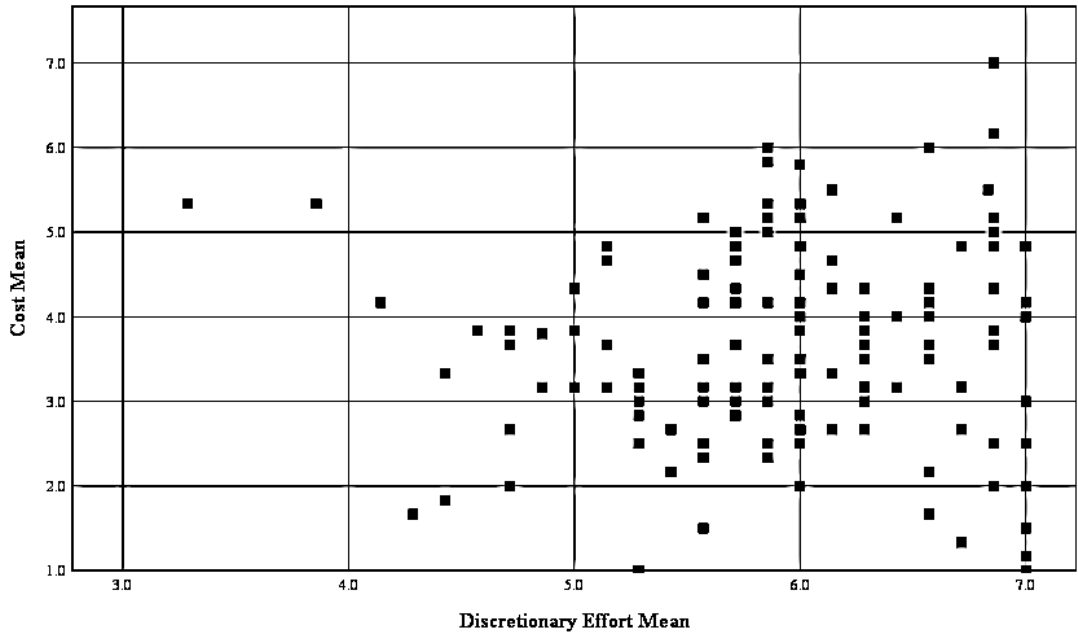


Figure 3. Scatterplot of cost and discretionary effort.

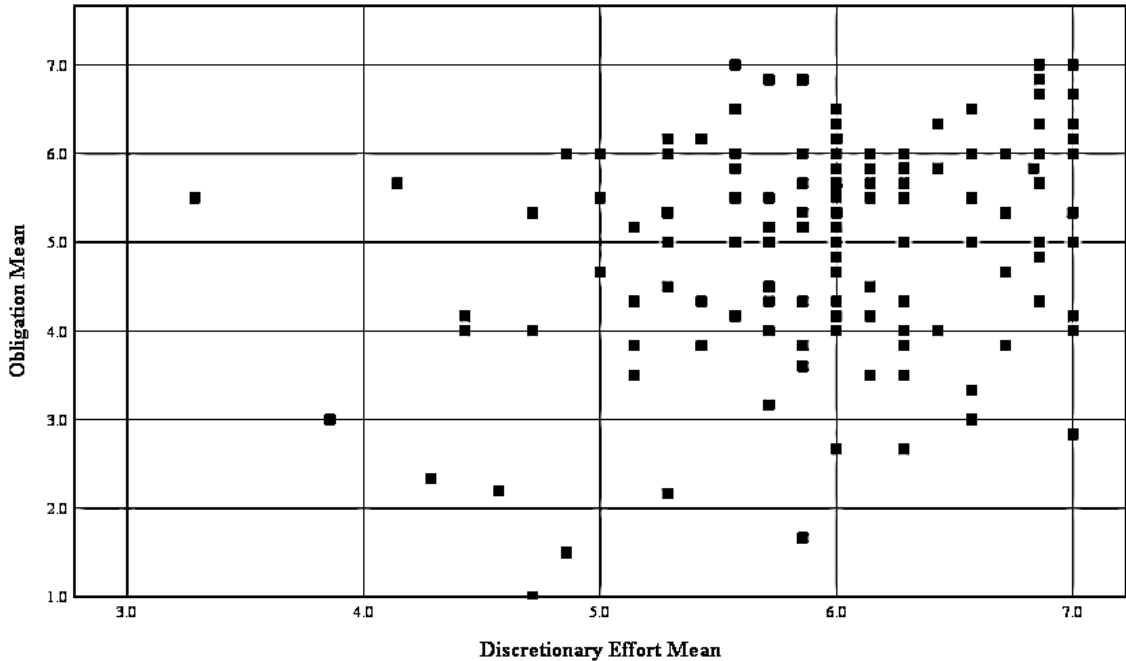


Figure 4. Scatterplot of obligation and discretionary effort.

As can be observed by the scatterplots, no clear linear shape forms. With no linear shape, homoscedasticity is not possible. The scatterplots make it unlikely a multiple linear regression will yield statistically meaningful results.

Multicollinearity

In multiple regression analysis, it is problematic if any of the independent variables significantly correlate with each other causing multicollinearity (Kutner, Nachtsheim, & Neter, 2004). The data set presents a statistically significant correlation between desire and obligation ($r = .595, p < .001$). In order to assess and quantify the severity of the multicollinearity, a variance inflation factor (VIF) was calculated (Kutner et al., 2004). When a VIF is greater than 10, multicollinearity is problematic (Kutner et al., 2004). The VIF results indicate the multicollinearity in this data set is not problematic (desire VIF = 1.613, cost VIF = 1.047, obligation VIF = 1.601).

Regression Results

A multiple regression analysis was calculated to determine the relationship between desire, cost, and obligation as independent variables and discretionary effort as a dependent variable. The results demonstrate a definite but small correlation between desire and discretionary effort and between obligation and discretionary effort.

Pearson Correlation was calculated and the results are displayed in Table 15. Correlation of the organizational commitment components with discretionary effort was .321 ($R = .321$, $R^2 = .103$, Adjusted $R^2 = .85$, $SE = .682$). Separately (but with the impact of the other components factored in), both organizational commitment components desire and obligation yielded a definite but small correlation, and no correlation was determined between the organizational commitment component cost and discretionary effort (desire $R = .269$, $p < .001$, $n = 149$; cost $R = .068$, $p = .206$, $n = 149$; obligation $R = .289$, $p < .001$, $n = 149$). A definite but small relationship was determined between the organizational commitment component desire and discretionary effort, and between the organizational commitment component obligation and discretionary effort. No relationship was determined between the organizational commitment component cost and discretionary effort.

Table 15

Pearson Correlations with Discretionary Effort

Commitment	Disc Effort R	p	n
Desire	.269	.000	149
Cost	.068	.206	149
Obligation	.289	.000	149

A three-factor ANOVA was calculated to determine the relationship of desire, cost, and obligation with discretionary effort. Mean responses of discretionary effort are presented in Table 16. The results for the ANOVA indicated a statistically significant correlation between the three organizational commitment component model and discretionary effort.

Table 16

Model Summary and ANOVA: Desire/Cost/Obligation with Discretionary Effort

Source	Sum of squares	<i>df</i>	<i>M</i> ²	<i>F</i>	Sig.
Regression	7.754	3	2.585	5.554	.001
Residual	67.472	145	.465		
Total	75.226	148			

The regression output for the coefficient was 4.659. The regression aligns with the analysis for Discretionary Effort = 4.659 + .103*Desire + .043*Cost +.111*Obligation. The results for the three organizational commitment model components desire, cost, and obligation demonstrated insufficient evidence to indicate a statistically significant relationship (desire *p* = .096, cost *p* = .367, desire *p* = .067).

Table 17

Regression Output: Discretionary Effort (DV)

Variables	Coefficients	<i>SE</i>	<i>t</i>	Sig.
(constant)	4.659	.348	13.388	.000
Desire	.103	.061	1.678	.096
Cost	.043	.048	.904	.367
Obligation	.111	.060	.184	.067

N=149

Research Objective 5

Research Objective 5 determined the relationship between the organizational commitment component model and intent to turnover. In Research Objectives 2 and 3, the independent variables (desire, cost, and obligation) were observed without consideration for the impact of the other two independent variables. In Research Objective 5, the relationship of the organizational commitment components desire, cost, and obligation with intent to turnover is considered taking into account the impact of the other two variables. A multiple linear regression analysis was calculated. The purpose of the multiple linear regression was to determine the relationship of desire, cost, and obligation with intent to turnover.

Linear Relationships and Homoscedasticity

As with Research Objective 4, for Research Objective 5 the researcher considered linearity and homoscedasticity by observing scatterplot graphs. When survey responses are plotted on a graph, the data points need to form a linear shape to satisfy the linearity assumption. The data points must also not take the shape of a cone, otherwise the assumption of homoscedasticity is not satisfied. A common way of assessing linearity and homoscedasticity is by looking at a scatterplot graph. In Figures 5, 6, and 7 below, scatterplot graphs of desire, cost, and obligation with intent to turnover may be observed:

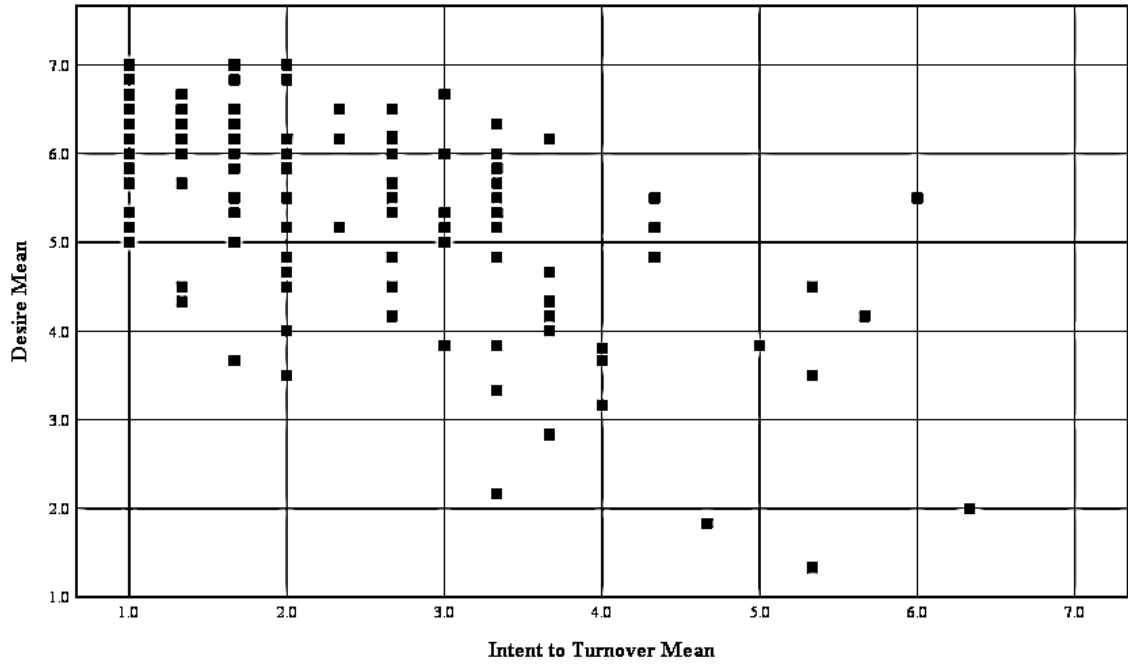


Figure 5. Scatterplot of desire and intent to turnover.

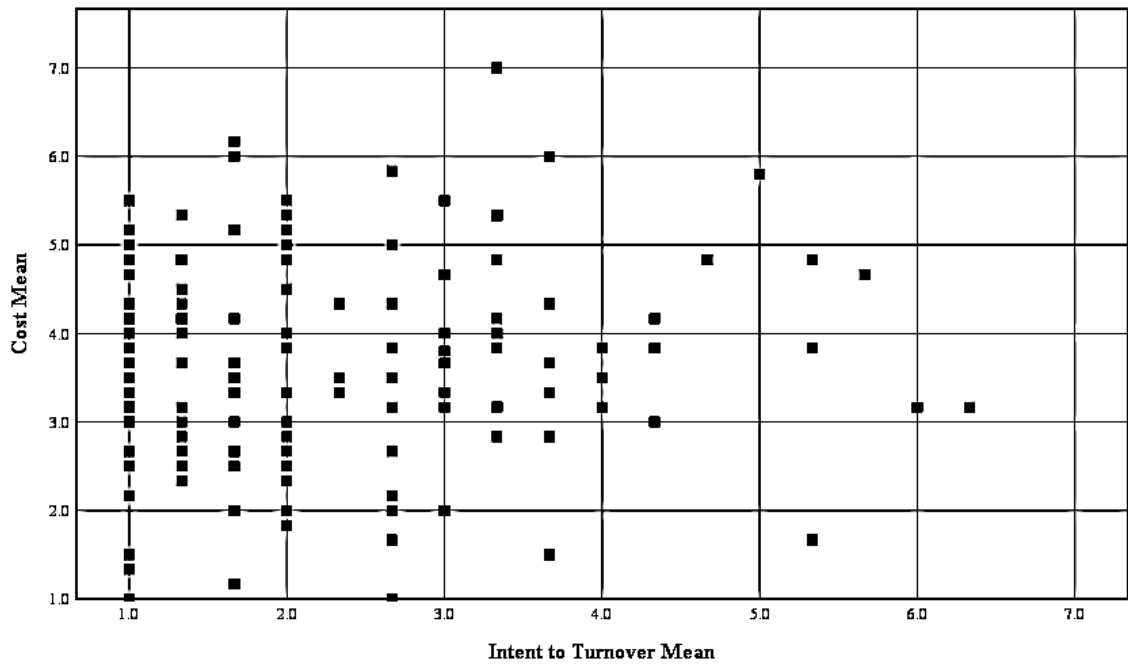


Figure 6. Scatterplot of cost and intent to turnover.

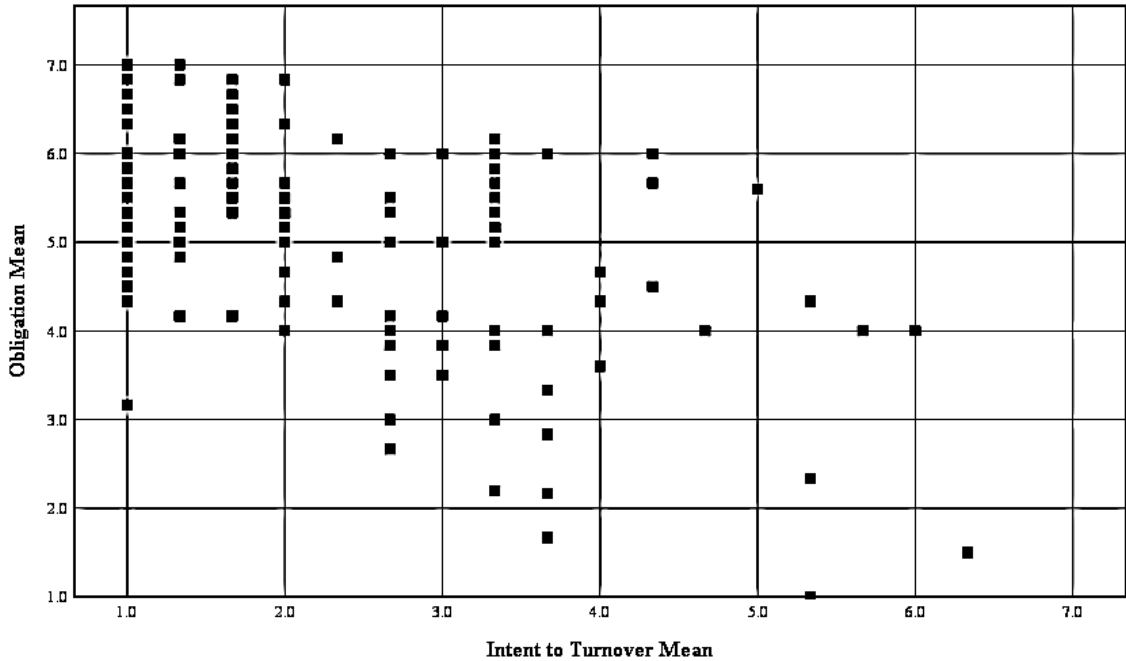


Figure 7. Scatterplot of obligation and intent to turnover.

When observing the scatterplot graphs relative to Research Objective 5 cost with intent to turnover does not appear to meet the linearity assumption. However, the assumption for both linearity and homoscedasticity may be met. The general shape of what could be linear forms, but with substantial error from what would be the regression line. The same issues with the multicollinearity between desire and obligation are still present ($r = .595, p < .001$), but the variance inflation factors (VIF) calculated demonstrated the homoscedasticity in this data set is not problematic (Desire VIF = 1.613, Cost VIF = 1.047, Obligation VIF = 1.601).

Regression Results

A multiple regression analysis was calculated to determine the relationship between desire, cost, and obligation as independent variables and intent to turnover as a dependent variable. Results show a moderate, substantial correlation between the three

components combined and intent to turnover. Pearson Correlation was calculated and the results are presented in Table 18. Correlation of desire, cost, and obligation was .687 ($R = .687$, $R^2 = .472$, Adjusted $R^2 = .461$, $SE = .901$). Individually (but with the impact of the other organizational commitment model components factored in), both desire and obligation indicated a strong correlation with intent to turnover. The organizational commitment component cost did not indicate a statistically significant relationship (desire $r = -.659$, $p < .001$, $n = 146$; cost $r = .107$, $p = .099$, $n = 146$; obligation $r = -.531$, $p < .001$, $n = 146$). A moderate relationship was determined between the organizational commitment component desire and intent to turnover, and between the organizational commitment component obligation and intent to turnover.

Table 18

Pearson Correlations with Intent to Turnover

Component	Intent to Turnover r	p	n
Desire	-.659	.000	146
Cost	.107	.099	146
Obligation	-.531	.000	146

A three-factor ANOVA was calculated to determine the relationship of desire, cost, and obligation with intent to turnover. Mean responses of intent to turnover are presented in Table 19. The results for the ANOVA indicated a statistically significant relationship between the three organizational commitment components and intent to turnover.

Table 19

Model Summary and ANOVA Table: Desire/Cost/Obligation

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	103.168	3	34.389	42.371	.000
Residual	115.250	142	.812		
Total	218.418	145			

The regression output, displayed in Table 20, yielded a primary coefficient of 6.218. The regression equation that aligns with the analysis is $\text{Intent to Turnover} = 6.218 - .544 * \text{desire} + .079 * \text{cost} - .251 * \text{obligation}$. The relationship of the organizational commitment model component desire to intent to turnover is significant ($p < .001$) as is the relationship between the obligation component and intent to turnover ($p = .002$). However, the cost component does not have a statistically significant relationship with intent to turnover ($p = .219$). Research Objective 5 determined the relationship of desire, cost, and obligation combined. The relationship is not statistically significant.

Table 20

Regression Output: Intent to Turnover (DV), n=146

Variables	Coefficients	SE	t	Sig.
(constant)	6.218	.465	13.376	.000
Desire	-.544	.081	-6.699	.000
Cost	.079	.064	1.234	.219
Obligation	-.251	.080	-3.149	.002

Summary

This non-experimental, explanatory, quantitative, cross-sectional study determined the relationship between the three components of organizational commitment (desire, cost, and obligation) separately to discretionary effort and intent to turnover.

This study also determined the relationship between the three components of organizational commitment combined to discretionary effort and intent to turnover. Air conditioning mechanics from a single company in the southeast were surveyed across three cities: Houston, Baton Rouge, and New Orleans. The researcher calculated multiple regression analyses on desire, cost, and obligation as independent variables and discretionary effort and intent to turnover as dependent variables. IBM SPSS Version 21.0 was used to calculate multiple regression analyses to determine the relationships between the three component organizational commitment model, discretionary effort, and intent to turnover. Chapter V details findings, conclusions, and recommendations from this study.

CHAPTER V – FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The four preceding chapters discussed the need for a better understanding of the nature of organizational commitment among air conditioning mechanics in the context of very low unemployment. Chapter V presents a summary of the study along with the findings, conclusions, and recommendations.

The purpose of this non-experimental, explanatory, quantitative, cross-sectional study was to determine the relationship of the organizational commitment model components desire, cost, and obligation with discretionary effort and intent to turnover. The survey instrument combined five scales validated in previous peer-reviewed research. The survey instrument for this study measured intensity levels in desire, cost, obligation, discretionary effort, and intent to turnover. The target population for this study was air conditioning mechanics working for the same company in Houston, Baton Rouge, and New Orleans. At the time of collection 211 mechanics ($N = 211$) were available and 150 ($n = 150$) returned usable surveys.

The following section includes findings based on the results presented in Chapter IV. The conclusions are based on the researcher's interpretation of participant responses from the collected survey data, Pearson Correlations, and multiple regression analyses. Recommendations are made based on those conclusions. Limitations, implications of the study, and recommendations for future research are presented.

Summary of Findings

Based on the findings of the study, the researcher determined that when organizational commitment model components were considered separately, desire indicated a definite but small relationship with discretionary effort ($r = .270, p = .001$),

obligation indicated a definite but small correlation with discretionary effort ($r = .289, p < .001$), and cost showed no statistically significant relationship with discretionary effort ($p = .398$) in this group of mechanics. When organizational commitment components were considered separately, desire had a moderate, substantial, negative correlation with intent to turnover ($r = -.656, p < .001$), obligation indicated a moderate, substantial, negative correlation with intent to turnover ($r = -.531, p < .001$), and cost yielded a statistically not significant relationship with intent to turnover ($p = .193$) for this group of mechanics.

When determining the relationships with the impact of all three organizational commitment components (desire, cost, and obligation) combined, a statistically significant relationship (desire $p = .096$, cost $p = .367$, and obligation $p = .067$). The commitment components combined also did not have a statistically significant relationship with intent to turnover (desire $p < .001$, cost $p = .219$, and obligation $p = .002$).

The findings from this study are not consistent with the three component model of organizational commitment (Meyer & Allen, 1991). The three component organizational commitment model indicates the component desire will cause high levels of discretionary effort and low levels of intent to turnover; the component obligation will cause medium levels of discretionary effort and intent to turnover; and the component cost will cause low levels of discretionary effort and high levels of intent to turnover.

Finding 1

The first finding was cost, as an organizational commitment model component, had no relationship with discretionary effort or intent to turnover for this study.

Conclusion. Meyer et al. (2002) demonstrated a relationship between the number of available alternatives and the commitment component cost. In a labor market with more job vacancies than qualified employees to fill them, cost may not continue to be a meaningful component in organizational commitment. Clearly, cost was an irrelevant organizational commitment component in this study. Cost was not statistically significant in any calculation even though desire and obligation had statistically significant relationships with both dependent variables (discretionary effort and intent to turnover).

In the past, when air conditioning mechanics considered the cost of leaving their company, few alternatives were available. However, in the environment of the current workforce gap, when air conditioning mechanics are aware of increased job opportunities, this awareness potentially neutralizes perceived cost. The perceived impact of losing relationships would more likely be felt as an issue of loyalty, the commitment component obligation, not a cost. The remainder of the cost component may completely vanish, which could explain why cost was irrelevant to this study.

Recommendations. In the current workforce environment, employers should reconsider the value of tactics designed to create ‘golden handcuffs’ to persuade employees to remain with their organization. Golden handcuff examples common in the air conditioning business include bonus structures for which employees are not eligible for three years, or offering mechanics certain company-paid technical training if the mechanic agrees to not leave the company for three years. Owners may mistakenly think they are reducing their risk of turnover, but when cost is not relevant as a commitment component they are not.

Owners and employers may want to consider investing heavily in compensation and leadership training for front line supervisors as opposed to competing for talent on wages alone, wages employers may believe are too good to leave. Front line supervisors have significant impact on the quality of the work environment in which air conditioning mechanics work. The higher the quality of the direct interface between a mechanic and their supervisor, the greater the relationship will trigger increases in desire and obligation. In previous years, the front line supervisor would put pressure on front line personnel and might behave without empathy for the challenges the front line personnel faces, but for the mechanic the perceived cost was too much to leave so they tolerated poor supervision or a deteriorating work environment. However this may no longer be the case. Business owners now may want to consider doing whatever it takes to build a supportive work environment and to be the employer of choice for their market.

More research needs to be explored on the relationship between cost as an organizational commitment model component and very low unemployment. At the time of the writing of this dissertation, the U.S. was experiencing the lowest unemployment levels in 50 years (United States Department of Labor, 2019b). That predates the formation of the three component model of organizational commitment. Since it is not known with certainty how long this low employment environment will last, these studies should commence quickly.

Finding 2

The second finding was relationships found between (a) desire and discretionary effort and (b) obligation and discretionary effort.

Conclusion. Clearly, desire, obligation, and discretionary effort are connected to each other. This left the researcher wondering if there is an extraneous variable that is the causal variable for all three. Antecedents of desire and obligation were discussed briefly in Chapter III. Shared values and personal involvement are two possible antecedents to desire. However, the possibility exists that shared values and personal involvement demonstrate a causal relationship with discretionary effort. It is possible both discretionary effort and desire have a shared antecedent. Two possible antecedents to obligation are psychological contract and the internalization of reciprocity norms. What if psychological contract and the internalization of reciprocity norms demonstrated a causal relationship with obligation and discretionary effort? It is possible obligation and discretionary effort have a shared antecedent as well. Maybe all desire, obligation, and discretionary effort have a shared causal variable.

The possibility of shared antecedents is of course hypothetical for this discussion because it is beyond the scope of the study. Nevertheless, correlations for this study beg the question of whether studies of organizational commitment should also factor in antecedents because organizational commitment does not happen in a vacuum.

Recommendations. More research needs to be done on organizational commitment components that includes variables beyond the three organizational commitment components as independent variables. This may significantly impact a general understanding of the model itself. A quality academic conversation in the

literature requires a model to form some consensus of support and to replicate research in different settings with different populations. However, in time this can create blind spots. The phenomenon of organizational commitment does not occur in a vacuum. That other extraneous variables are woven into the experience of organizational commitment is very reasonable, but studies only considering the three components and one or more discretionary outcomes may leave researchers and consultants blind to variables that are impacting the dependent variables in the study. The three component model of organizational commitment is well researched, but more additional research is needed to expand the focus of causation to ensure the consistency of the model is stable.

Limitations

Limitations are items impacting the study, but cannot be controlled by the researcher. This study was limited to the voluntary response of air conditioning mechanics all working for the same company in Houston, Baton Rouge, and New Orleans. The researcher chose air conditioning mechanics and the owner of the company was willing to provide access to his employees. Air conditioning mechanics are one of the most in demand professionals in the current labor market and an element of testing the three component model of organizational commitment in that milieu added value to the study.

Recommendations for Future Research

To better understand the dynamics of this study among air conditioning mechanics, more studies are recommended with mechanics and in diverse geographical areas. One of the dynamics in this study was air conditioning mechanics working in a labor market of very low unemployment. This begged the questions of the relationship

between cost as a commitment component and low unemployment because the mechanics can work wherever they choose. A similar study could be done with very highly talented and high performing employees in other industries who also have the opportunity to work for whomever they want to work because of their talent. Cost as a commitment component may also no relationship with discretionary effort and intent to turnover in that context also.

Conclusion

This chapter provided a summary of the study and the interpretation of the results. Findings, conclusions, and recommendations were presented that both align with the literature review and the results of both correlation and multiple regression calculations. The three component model of organizational commitment and SDT served as the theoretical framework for the study. That framework explained the impact desire, cost, and obligation have on discretionary effort and intent to turnover. The purpose of this study was to determine the relationship of the three components of organizational commitment with discretionary effort and intent to turnover. This study has accomplished that purpose. With more studies and more meaningful actions taken based on this research by employers and managers, companies can not only survive very low unemployment labor markets, but thrive and win.

One of the important values of the three component commitment model of organizational commitment is finding what version of it is reflected in actual companies. A too easy act is to describe the three component model of organizational commitment, assume it works the same way in every setting, and then start making decisions and spending money as an owner without doing the research to confirm that, indeed, it is

working as assumed. In the case of this population, survey responses were skewed strongly toward high desire. Possibly, that skewed variable trumps cost in the commitment experience of this population. Either way, surveys need to be executed and model needs to be developed for every company.

For consultants who use the three component model of organizational commitment, care and commitment should be taken to not simply sell a theoretical model and then start making recommendations based on it. The surveys have to be given out, collected and the data analyzed. The three component model of organizational commitment is not static and applicable the same way in every organization. This study was evidence of that. Each company might have its own version of the three component model of organizational commitment based on its own culture and context.

Social and business theories in an academic context are fascinating and engaging, but in the marketplace they can be easily applied without a proper research grounding in the actual population. In this case the population are actual air conditioning mechanics who have families and mortgages. Without real research but a knowledge of the three component model of organizational commitment entire strategies of workforce development and retention could be applied to increase discretionary effort and reduce intent to turnover that would likely not work for this group. This is, of course, wasted resources. At the same time, there would be a tendency to blame the technicians, to conclude wrongly that they are lazy and no intervention is going to change that. Those with the knowledge of these types of theories, if applying them to a workforce, have an obligation to test and verify the theory such that if the intervention based on the theory does not work, the workforce is not blamed. More studies such as this one are needed in

the academic conversation to be sure. But studies like this one are of paramount importance to owners and managers of employees so that a blanket application of theory does not lead to the shaming and blaming of the workforce receiving the intervention.

APPENDIX A – PERMISSION FROM COMPANY TO PERFORM RESEARCH



11-8-17

John Sherk

Dear John,

This Letter is to indicate that you have my permission to survey our technicians as part of your dissertation research.

Regards,

A handwritten signature in black ink, appearing to read "Robert Miller", is written over the typed name.

Robert Miller
Owner

APPENDIX B – INSTITUTIONAL BOARD APPROVAL

Office of
Research Integrity



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NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

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

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident template on Cayuse IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: IRB-19-51

PROJECT TITLE: The Relationship Between Organizational Commitment, Discretionary Effort, and Turnover Intent

SCHOOL/PROGRAM: School of ISPD

RESEARCHER(S): John Sherk, Cynthia Gaudet

IRB COMMITTEE ACTION: Return to PI

CATEGORY: Expedited

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

PERIOD OF APPROVAL: February 1, 2019 to February 1, 2020

A handwritten signature in cursive script that reads "Donald Sacco".

Donald Sacco, Ph.D.

APPENDIX C – SURVEY INSTRUMENT

Anonymous Survey Instrument

Direction: Read each statement in 4 questions below and then circle the corresponding answer that most accurately describes your situation. **YOU MAY CHOOSE TO NOT ANSWER ANY QUESTION YOU PREFER NOT TO ANSWER.**

1. In what geographical location do you work? (circle one) A) Houston B) New Orleans C) Baton Rouge D) Jackson E) Mobile
2. In your current work situation are you (circle one) A) usually nested in a single location or B) moving from place to place
3. How many years of experience do you have in the HVAC field? (circle one) A) 0-2 B) 3-5 C) 5-10 D) 10+ years
4. How many years of experience do you have working for Star Service? (circle one) A) 0-2 B) 3-5 C) 5-10 D) 10+ years

Direction: Read each statement in the column on the left and then place an “X” in the corresponding box that most accurately describes your response.

Statement	Strongly Disagree	Disagree	Slightly Disagree	Undecided	Slightly Agree	Agree	Strongly Agree
5. I would be very happy to spend the rest of my career with this organization.							
6. I really feel as if this organization’s problems are my own.							
7. I do not fee a strong sense of “belonging” to my organization							
8. I do not feel “emotionally attached” to this organization							
9. I do not feel like “part of the family” at my organization.							
10. This organization has a great deal of personal meaning for me.							

Statement	Strongly Disagree	Disagree	Slightly Disagree	Undecided	Slightly Agree	Agree	Strongly Agree
11. Right now, staying with my organization is a matter of necessity as much as desire.							
12. It would be very hard for me to leave my organization right now, even if I wanted to.							
13. Too much of my life would be disrupted if I decided I wanted to leave my organization now.							
14. I feel that I have too few options to consider leaving this organization.							
15. If I had not already put so much of myself into this organization, I might consider working elsewhere.							
16. One of the few negative consequence of leaving this organization would be the scarcity of available alternatives.							
17. I do not feel any obligation to remain with my current employer.							
18. Even if it were to my advantage, I do not feel it would be right to leave my organization now.							
19. I would feel guilty if I left my organization now.							
20. This organization deserves my loyalty.							
21. I would not leave my organization right now because I have a sense of obligation to the people in it.							

Statement	Strongly Disagree	Disagree	Slightly Disagree	Undecided	Slightly Agree	Agree	Strongly Agree
22. I owe a great deal to my organization.							
23. When I work, I really exert myself to the fullest, beyond that what is expected.							
24. I finish a job even if it means sacrificing breaks or lunches.							
25. I do more than is expected of me.							
26. I voluntarily put in extra hours to achieve a result faster.							
27. I persist in overcoming obstacles to complete an important task							
28. I put in extra effort when I find it necessary.							
29. I work harder than expected to help my organization be successful.							
30. I frequently think of quitting my job.							
31. I am planning to search for a new job during the next 12 months.							
32. If I have my own way, I will be working for this organization one year from now.							

APPENDIX D – PERMISSIONS

TCM Employee Commitment Survey - File Download is now Available!



InnoVerify <no-reply@innoverify.ca>

Today, 3:58 PM

John Sherk



Reply all | v

This message was identified as spam. We'll delete it after 30 days. It's not spam

This item will expire in 30 days. To keep this item longer, apply a different label.

Label: Junk Email (1 month) Expires: 4/9/2019 3:58 PM

Hello John,

Thank you for your purchase of Academic License. You may log in to download the product at this URL:
<http://innoverify.com/shop/download/?pid=54dcf78c2007a>

Log in using your email address above. Your access password has been set to: NeRIKa34

Please save this message, or the URL for future reference.

Regards,
TCM Employee Commitment Survey



Stephen May <stephen@...> Jan 14, 2019, 12:58 AM



to me ▾

Hi John,

Thank you for your enquiry.

We no longer publish this journal but from what I recall that article would have been published with the author holding copyright so you do need to contact them for permission. However, my advice if you have tried and been unsuccessful is to use the material with a full citation and reference and add a par in your dissertation that all reasonable attempts were made to contact the author for permission and you remain open to contact if anyone has a problem.

Cheers
Stephen

Publisher/Owner
Australian Academic Press

Requesting permission to use your Intent to Turnover Scale



Inbox x



John Sherk <john@johnpsh... Fri, Dec 7, 2018, 11:00 AM
to colar1sm ▾



Greetings Dr. Colarelli,

My name is John Sherk and I am a doctoral student at the University of Southern Mississippi in Human Capital Development. I would like to study the relationship between John Meyer's Three Component Organizational Commitment Model and intent to turnover in labor markets with more jobs than talent.

May I use your Intent to Turnover Scale as part of my survey instrument? I'm speaking of the three question scale you used in *Methods of Communication and Mediating Processes in Realistic Job Previews* (1984).



Stephen Colarelli <scolare... Fri, Dec 7, 2018, 11:12 AM
to me, Stephen ▾



Yes, that would be fine.
Stephen M. Colarelli
Professor
Department of Psychology
Central Michigan University
Mt. Pleasant, MI 48859

APPENDIX E – SURVEY QUESTIONS

Demographic Questions

1. In what geographical location do you work? (circle one)
A) Houston B) New Orleans C) Baton Rouge D) Jackson E) Mobile
2. In your current work situation are you (circle one)
A) Usually nested in a single location or
B) Moving from place to place daily?
3. How many years of experience do you have in the HVAC field? (circle one)
A) 0-2 B) 3-5 C) 5-10 D) 10+ years
4. How many years of experience do you have working for Star Service? (circle one)
A) 0-2 B) 3-5 C) 5-10 D) 10+ years

Affective Commitment Scale (Meyer & Allen, 2004)

5. I would be very happy to spend the rest of my career with this organization.
6. I really feel as if this organization's problems are my own.
7. I do not feel a strong sense of "belonging" to my organization (reverse scored)
8. I do not feel "emotionally attached" to this organization (reverse scored)
9. I do not feel like "part of the family" at my organization. (reverse scored)
10. This organization has a great deal of personal meaning for me.

Continuance Commitment Scale (Meyer & Allen, 2004)

11. Right now, staying with my organization is a matter of necessity as much as desire.

12. It would be very hard for me to leave my organization right now, even if I wanted to.
13. Too much of my life would be disrupted if I decided I wanted to leave my organization now.
14. I feel that I have too few options to consider leaving this organization.
15. If I had not already put so much of myself into this organization, I might consider working elsewhere.
16. One of the few negative consequence of leaving this organization would be the scarcity of available alternatives.

Normative Commitment Scale (Meyer & Allen, 2004)

17. I do not feel any obligation to remain with my current employer. (reverse scored)
18. Even if it were to my advantage, I do not feel it would be right to leave my organization now.
19. I would feel guilty if I left my organization now.
20. This organization deserves my loyalty.
21. I would not leave my organization right now because I have a sense of obligation to the people in it.
22. I owe a great deal to my organization.

Discretionary Effort Scale (Lloyd, 2008)

23. When I work, I really exert myself to the fullest, beyond that what is expected.
24. I finish a job even if it means sacrificing breaks or lunches.
25. I do more than is expected of me.
26. I voluntarily put in extra hours to achieve a result faster.

27. I persist in overcoming obstacles to complete an important task

28. I put in extra effort when I find it necessary.

29. I work harder than expected to help my organization be successful.

Intention to Turnover Scale (Colarelli, 1984)

30. I frequently think of quitting my job.

31. I am planning to search for a new job during the next 12 months.

32. If I have my own way, I will be working for this organization one year from now.

APPENDIX F – CONSENT TO PARTICIPATE IN STUDY RESEARCH

Information About this Study

Purpose

This research study is being conducted by John P. Sherk, Ph.D. candidate at The University of Southern Mississippi. As part of my Ph.D. organizational commitment research, please answer the following survey questions about you and [organization name].

Description

There are no known risks for participants who complete this survey. The information gathered will be used to contribute to a better understanding of the experience air conditioning mechanics have at work. This voluntary survey should take approximately **14 minutes** to complete. All responses will be compiled electronically in a spreadsheet and statistical software. Your responses will not be linked to you. All data will be stored in a password protected electronic format. All records will be kept private and confidential **as this is an anonymous and confidential survey.**

Appreciation

Upon completion of the survey, if you choose, you will be entered into a drawing for 1 of 5 \$100 gift cards. Winners will be randomly chosen.

Participation

The Institutional Review Board at The University of Southern Mississippi has approved this research study. The purpose of the Institutional Review Board is to ensure that research studies conducted with human subjects follow federal regulations.

Questions about your rights as a research participant should be directed to Dr. Cyndi Gaudet at (228) 214-3491. Participation in this study is voluntary. Participants can withdraw at any time.

Contact

If you have any questions, feel free to contact me at john.sherk@usm.edu. By signing below, you acknowledge that you have read the information above and are agreeing to be a research participant. You are free to withdraw at any time.

Name (printed) _____

Name (signed) _____ Date: _____

APPENDIX G – COMMUNICATION PIECES

Recommended Language for E-mail from Owner to General Managers

Gentlemen,

John Sherk is a Ph.D. student performing research on organizational commitment among our techs. Please work with him in his data gathering effort. The survey should take about 15 minutes. I recommend you distribute it during your next safety meeting to keep it simple.

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