LEADERSHIP, PERFORMANCE, AND TURNOVER INTENTION: A RELATIONAL APPROACH TO LEADERSHIP CONSTRUCTS

by

Larry Parks

MICHELLE K. PREIKSAITIS, JD, PhD, Faculty Mentor and Chair ELIZABETH THOMPSON, PsyD, Committee Member WILLIAM J. McKIBBIN, PhD, Committee Member

Todd C. Wilson, PhD, Dean,
School of Business and Technology

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree

Doctor of Business Administration

Capella University

December 2020



ProQuest Number: 28260076

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent on the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 28260076

Published by ProQuest LLC (2020). Copyright of the Dissertation is held by the Author.

All Rights Reserved.

This work is protected against unauthorized copying under Title 17, United States Code Microform Edition © ProQuest LLC.

ProQuest LLC 789 East Eisenhower Parkway P.O. Box 1346 Ann Arbor, MI 48106 - 1346



© Larry Parks, 2020



Abstract

Leadership behavior has been associated with task performance and turnover intention from a large organization and managerial perspective, but research illustrating leadership behaviors from small business and subordinate perspectives were lacking. The participants in this study included 89 nonmanagerial employees that work in a small manufacturing business for at least 90 days. This research applied a nonexperimental quantitative analysis to examine the relationship of leadership behaviors, task performance, and turnover intentions. Participants were assessed using Bass and Avolio's Multifactor Leadership Questionnaire, Roodt's Turnover Intention Scale, and Murdoch's Task Performance Scale. These instruments were consolidated into one instrument and distributed to identify any relationship between leadership behaviors, task performance, and turnover intentions. The multiple linear regression correlational method found that transactional and passive-avoidant leadership had a significant, but weak, relationship with turnover intention and transformational leadership had a significant, but weak, relationship with employee performance. These findings have implications for scholars and practitioners who want to understand the influence behaviors have on task performance and turnover intentions as well as those who develop new leadership talent. Future research opportunities include replication on a larger scale, focus on demographic elements, focus from the managerial or leadership perspective, and expanding the research to include outcomes of leadership, precisely extra effort, effectiveness, and satisfaction.



Dedication

I dedicate this to all educators with whom I had the opportunity to learn and who inspired me to pursue higher education. To my parents for setting the example of persistence and moral values. To my past and current supervisors who provided me the time to focus on the varying requirements of the doctoral process. To my wife for keeping me on task, to my inlaws for additional perspective, and in memory of my grandfather Bill.



Acknowledgments

Many thanks to my family, who have supported me and sacrificed time and patience during this journey. This achievement was motivated by the examples set by my parents, both as positive role models and for emphasizing the importance of higher education.

To the DBA program faculty and staff of Capella University, especially my mentors Dr, Margaret Carter and Dr. Michelle Preikseitis, thank you for your knowledge, support, encouragement, and patience. Had you not invested your time and knowledge, none of this would have been possible. A special thank you to Dr. William J. McKibbin, Dr. Judy Blando, and Dr. Bruce Laviolette for serving as my committee members and providing a wealth of knowledge that assisted in shaping this research. Now that I understand what you went through in your journey, I am even more proud to join your ranks.

To my friends and fellow scholars, Dustan, Michelle, and Dr. Drew Fowler, your achievements and daily grind provided inspiration and motivation to get through this. Finally, my wife Sandy, many thanks for your patience and understanding through this 10-year educational journey. Faith and focus on the big picture and possibilities helped to maintain focus on the purpose of this adventure. I hope this accomplishment is beneficial to our family and us and that it provides opportunities to benefit the business and academic community.



Table of Contents

Acknowledgments	V
List of Tables	ix
List of Figures	xii
CHAPTER 1. INTRODUCTION	1
Introduction	1
Background	2
Business Problem	7
Research Purpose	8
Research Questions	8
Rationale	10
Theoretical Framework	10
Significance	14
Theoretical	15
Methodological	16
Practical	16
Definition of Terms	17
Assumptions and Limitations	17
Organization for Remainder of Study	19
CHAPTER 2. LITERATURE REVIEW	20

Introduction	0
Review of the Literature	23
Conclusions5	8
CHAPTER 3. METHODOLOGY6	4
Introduction6	4
Design and Methodology6	4
Population and Sampling6	5
Setting6	8
Data Collection6	8
Instrumentation	1
Hypotheses	2
Data Analysis	'4
Validity and Reliability	5
Ethical Considerations	7
CHAPTER 4. RESULTS8	0
Introduction	0
Overview80	0
Data Collection Results	1
Descriptive Analysis	2
Analysis of Hypotheses 8	24

Summary8'
CHAPTER 5. CONCLUSIONS
Introduction89
Evaluation of Research Questions and Hypotheses
Fulfillment of Research Purpose 9
Contribution to Business Problem98
Recommendations for Further Research
Conclusions
REFERENCES102
APPENDIX A. STEPS IN STATISTICAL ANALYSIS112
APPENDIX B. LINEAR REGRESSION TRANSFORMATIONAL LEADERSHIP ANI TURNOVER INTENTION113
APPENDIX C. LINEAR REGRESSION TRANSACTIONAL LEADERSHIP AND TURNOVER INTENTION118
APPENDIX D. LINEAR REGRESSION PASSIVE-AVOIDANT LEADERSHIP AND TURNOVER INTENTION122
APPENDIX E. LINEAR REGRESSION TRANSFORMATIONAL LEADERSHIP AND EMPLOYEE PERFORMANCE12
APPENDIX F. LINEAR REGRESSION TRANSACTIONAL LEADERSHIP AND EMPLOYEE PERFORMANCE132
APPENDIX G. LINEAR REGRESSION PASSIVE-AVOIDANT LEADERSHIP AND EMPLOYEE PERFORMANCE
APPENDIX H. DESCRIPTIVE ANALYSIS140

viii



List of Tables

Table 1. Overview of Core Literature	24
Table 2. Overview of Seminal Literature	25
Table 3. Census Data for Study Location.	65
Table 4. Matrix of Manufacturing Variance and Longevity	67
Table 5. Participant Demographics	84
Table 6. Summary of hypotheses	88
Table A-1. Steps in Statistical Analysis	112
Table B-1. Summary Statistics	113
Table B-2. Correlation Matrix	113
Table B-3. Multicollinearity Statistics	113
Table B-4. Analysis of Variance (TIS)	114
Table B-5. Goodness of Fit Statistics (TIS)	114
Table B-6. Model Parameters (TIS)	114
Table B-7. Standardized Coefficients (TIS)	115
Table C-1. Summary Statistics	118
Table C-2. Correlation Matrix	118
Table C-3. Multicollinearity Statistics.	118
Table C-4. Goodness of fit Statistics (TIS)	119
Table C-5. Analysis of Variance (TIS)	119

Table C-6. Model Parameters (TIS)	119
Table C-7. Standardized Coefficients (TIS)	.120
Table D-1. Summary Statistics	.122
Table D-2. Correlation Matrix	.122
Table D-3. Multicollinearity Statistics	.122
Table D-4. Analysis of Variance (TIS)	123
Table D-5. Goodness of Fit Statistics (TIS)	123
Table D-6. Model Parameters (TIS)	123
Table D-7. Standardized Coefficients (TIS)	124
Table E-1. Summary Statistics	127
Table E-2. Correlation Matrix	127
Table E-3. Multicollinearity Statistics	127
Table E-4. Analysis of Variance	128
Table E-5. Goodness of Fit Statistics (TPS)	128
Table E-6. Model Parameters (TPS)	129
Table E-7. Standardized Coefficients (TPS)	129
Table F-1. Summary Statistics	132
Table F-2. Correlation Matrix.	132
Table F-3. Multicollinearity Statistics	132
Table F-4. Analysis of Variance (TPS)	132

Table F-5. Goodness of Fit Statistics (TPS)	133
Table F-6. Model Parameters (TPS)	133
Table F-7. Standardized Coefficients (TPS)	133
Table G-1. Summary Statistics	136
Table G-2. Correlation Matrix	136
Table G-3. Multicollinearity Statistics	136
Table G-4. Analysis of Variance	136
Table G-5. Goodness of Fit Statistics (TPS)	137
Table G-6. Model Parameters (TPS)	137
Table G-7. Standardized Coefficients (TPS)	137
Table H-1. Summary of Hypotheses	140
Table H-2. Descriptive Analysis (Quantitative Data)	140
Table H-3. Correlation Matrix (Spearman)	140
Table H-4. Summary Statistics	141
Table H-5 Normality Tests	142

List of Figures

Figure 1. A theoretical framework for the research study
Figure 2. Overview of research elements
Figure 3. Overview of strategic fit for the study
Figure 4. Theoretical framework showing the significant hypotheses to answer the research questions
Figure B-1. Standardized coefficients for turnover intentions and elements of transformational leadership
Figure B-2. Standardized residuals for turnover intentions and elements of transformational leadership
Figure B-3. Predictive analysis for turnover intentions and elements of transformational leadership
Figure B-4. Standardized residuals and observations for turnover intentions and transformational leadership
Figure C-1. Standardized coefficients for turnover intentions and transactional leadership.120
Figure C-2. Standardized residuals for turnover intentions and transactional leadership120
Figure C-3. Predictive analysis for turnover intentions and transactional leadership121
Figure C-4. Standardized residuals and observations for turnover intentions and transactional leadership
Figure D-1. Standardized coefficients for turnover intentions and elements of passive-avoidan leadership
Figure D-2. Standardized residuals for turnover intentions and elements of passive-avoidant leadership
Figure D-3. Predictive analysis for turnover intention and passive-avoidant leadership12

Figure D-4. Standardized residuals and observations for turnover intentions and passive-avoidant leadership
Figure E-1. Standardized coefficients for employee performance and elements of transformational leadership
Figure E-2. Standardized residuals for employee performance and elements of transformational leadership
Figure E-3. Predictive analysis for employee performance and elements of transformational leadership
Figure E-4. Standardized residuals and observations for employee performance and transformational leadership
Figure F-1. Standardized coefficients for employee performance and elements of transactional leadership
Figure F-2. Standardized residuals for employee performance and transactional leadership134
Figure F-3. Predictive analysis for employee performance and transactional leadership135
Figure F-4. Standardized residuals and observations for employee performance and transactional leadership
Figure G-1. Standardized coefficients for employee performance and elements of passive-avoidant leadership
Figure G-2. Standardized residuals for employee performance and passive-avoidant leadership
Figure G-3. Predictive analysis for employee performance and passive-avoidant leadership.139
Figure G-4. Standardized residuals and observations for employee performance and passive-avoidant leadership
Figure H-1. Correlation map for leadership behaviors, turnover intentions, and employee performance





CHAPTER 1. INTRODUCTION

Introduction

The objective of this research was to examine and report on leadership behaviors and the influence on employee performance and turnover intentions within small manufacturing businesses. A review of prior literature supported a need to focus on this topic. In 2012, Subramony and Holtom, from a turnover perspective, reported that few studies explored or examined mechanisms that mediate turnover and performance. An increase in leadership research resulted in the advancement of diverse leadership theory but did not focus on the topic of employee performance and turnover intention (Katou, 2015). Katou was interested in the relationship between transformational leadership and organizational performance. Jing and Avery (2016) provided evidence that gaps existed in research that leaves the relationship between leadership styles and performance indeterminable.

The Bureau of Labor Statistics (2019) indicated that the central United States depicts an increase in turnover or job availability from 39.7% in 2014 to 44.9% in 2019. This trend demonstrates the possibility that increased turnover may be negatively influencing growth in the small manufacturing industry. The findings of this study contributed to the gap in business research regarding the relationship between leadership behaviors, maximizing performance, and minimizing turnover. The study effort necessitated the review and scaling of three instruments previously tested and used to collect data. Consolidation occurred to condense elements from those instruments to one instrument in the Qualtrics format for this study. Multiple analyses

occurred to present findings on whether there is a correlation between leadership behaviors and employee task performance and turnover intention, as elaborated in the fourth chapter.

This chapter extends the discussion of leadership behaviors, task performance, and turnover intentions with a brief review of past and current literature. It introduces the business problem and provides a background to the problem by analyzing existing research for any gaps in knowledge. This chapter highlights the purpose and justification for the research and poses questions answered by the study. The discussion presented on the theoretical framework determines the value of the research questions as well as the best approach for analyzing the results. This chapter concludes with the study's significance and the definition of terms used throughout the dissertation. Clarification presents a variety of meanings or interpretations for this study of assumptions and limitations as a means of transparency.

Background

The effort for the study included examining the variables through three paths. The first path included research on leadership behaviors that exist in business. The second path involved research related to task performance, and the third path involved turnover intentions. The paths related to task performance and turnover intentions were analyzed in general terms to gain a better understanding of what is most common in small businesses. These paths became more granular as the focus moved toward how task performance and turnover intentions exist in small businesses, with a focus on the manufacturing industry. Literature as cited by seminal and core authors about the topics of performance, turnover, and leadership, demonstrated the



advancements in leadership research, while also acknowledging that there is limited research on how leadership behaviors influence performance and turnover intentions (Chang, 2016; Jing & Avery, 2016; Katou, 2015). Much of the literature focused on small businesses in general to demonstrate the lack of research within smaller markets, especially studies focused on small manufacturing businesses. Chang (2016), Katou (2015), and Mekraz and Raghava (2016) validated the effectiveness that leadership behaviors have on performance and turnover through analysis of ambidexterity, empowerment, and dissonance. Considering that much of the literature is from a managerial perspective, this study analyzed data from the employee or subordinate perspectives.

Makris (2017) stated that many small businesses are prepared for culture damage and treat employees as expendable. The two issues identified by Makris demonstrate that small businesses need to hire the right people for the job, and that will maintain an ideal culture that lowers turnover. Makris also found that across all small business, turnover is averaging 16%, which is an increase of 4% before 2017.

The reviewed literature illustrated the evolution of leadership theory, where it began with "Great Man" theories and moved through several iterations that include trait theory, behaviorist theory, situational leadership theory, contingency theory, transactional theory, and transformational theory. Despite the observation that these theories demonstrate an individualistic tone, the literature suggests that dispersed leadership is gaining momentum. The view is such because the constructs focus on psychometrics instead of a designated leader

(Bolden, Gosling, Marturano, & Dennison, 2003). Dispersed leadership relies on processes that permeate administration throughout the organization, which changes the approach from making leaders to leaderful organizations.

Literature from the previous years focused on the leadership constructs from the managerial perspective; however, there was some resurgence from the subordinate perspective. This insight is evident in the writings of Katou (2015), as the associated study offers insight into transformational theory and performance from the perspective of employee relations. Despite the focus on the subordinate view, current literature demonstrates a trend that places focus on teams rather than individuals because of the dynamics of uncertainty. Considering the dynamics and change of business, organizations are leaning toward self-managed teams (Gonzalez-Mulé, Courtright, DeGeest, Seong, & Hong, 2014). Autonomy has variably adverse effects on team performance because of a lack of clarity in organizational goals (Gonzalez-Mulé et al., 2014). Gonzalez-Mulé et al. theorized that providing performance feedback to teams with high autonomy can lead to increased clarity and performance.

According to Gale and Brown (2013); Junaidu, Abdul, Mohamed, and Sambasivan (2012); Shukla and Shukla (2014), small businesses provide sustainability to the U.S. economy and create jobs; however, despite the benefits to the economy, small businesses are historically sluggish in economic performance. Solomon, Bryant, May, and Perry (2013) stated that in 15 start-up companies, 30% failed in the first two years. Regarding the research questions for this study, providing balanced empowerment (Lee, Cheong, Kim, & Yun, 2016) and performance

4

feedback (Gonzalez-Mulé et al., 2014) can foster an environment where the employees experience increased performance to attain the outcomes that minimize turnover intentions. Considering the limited research about leadership in small businesses (Marcella & Illingworth, 2012), subordinates, when properly led, leadership may result in organizational success (Germain, 2012; Lavine, 2014).

Empowerment allows employees to participate in decision-making, which increases performance as employees learn to take risks (Lee et al., 2016). These researchers believed that empowerment enhances autonomy and self-responsibility. According to Lee et al., empowerment drives success, due in part to the behaviors exhibited by leaders. Attributes such as increased job satisfaction, managerial effectiveness, creativity, and team performance are reflective of the leaders' behavior within the various leadership styles. In contrast, some researchers have found that too much or too little empowerment can have adverse effects on employees (Lee et al., 2016). Iqbal, Anwar, and Haider (2015) stated that employee performance is dependent on whether there is a match between the leader's ability to lead, which is contingent on capabilities, style, and behaviors and the competency of the employees.

Employee turnover has gained the attention of scholars. Mainly, attention to the consequence's turnover has on the organization (Subramony & Holtom, 2012). In congruence with the definition of transformational theory, Miller (2014) stated that alignment ensures that everyone in the organization understands the direction the organization intends to move as well as specific roles that facilitate the necessary actions. The criteria to minimize turnover is best

when viewing from a psychological cost perspective (Mishra, S. K. & Kumar, 2016). When determining rules for limiting turnover, leaders need to consider technical competence, work stressors, emotional dissonance, and emotional exhaustion.

Considering the dynamics and uncertainty of business, organizations are leaning toward self-managed teams (Gonzalez-Mulé et al., 2014). Autonomy has variably adverse effects on team performance, also referred to as a lack of clarity in organizational goals (Gonzalez-Mulé et al., 2014). Providing performance feedback to teams with high autonomy can lead to increased transparency and performance. At the same time, providing balanced empowerment (Lee et al., 2016) and performance feedback (Gonzalez-Mulé et al., 2014) can foster an environment where the employee's experience can increase performance, and attain the outcomes that minimize turnover intentions.

Findings from the literature provide a common theme that organizations focused on flexibility, empowerment, and mitigating dissonance, or to say promoting a favorable climate, yielded increased performance and less turnover (Chang, 2016; Katou, 2015; Mekraz & Raghava, 2016). This study aimed to identify if these findings are valid for small businesses, specifically, the manufacturing industry. The identification of leadership styles, behaviors, and capabilities concerning employee perspectives of performance and turnover intentions were critical in answering the research questions.

Business Problem

A gap exists in business research regarding the influence leadership behaviors have on performance and turnover intentions within the small manufacturing business arena. Prior literature exists on large manufacturing businesses but is limited on small manufacturing businesses. This research introduced an opportunity to research and report on leadership theories and variables that may play a role in task performance and turnover intentions. Based on findings during a review of the literature (Chang, 2016; Katou, 2015; Mekraz & Raghava, 2016; Mishra, S. K. & Kumar, 2016), the following question was worth seeking further understanding. How do leadership behaviors influence task performance and turnover intentions within small businesses in the central United States?

Searching various chambers of commerce yielded negative results for studies related to this topic. The Small Business Association (2015, 2019) provided profiles for the states of interest in this study. Probing the Small Business Administration (2019) business profiles; in states such as Kansas, manufacturing small businesses constituted 36.9% of the business share, which was down 1% since 2015. Missouri's business share was 39.3%, which was down 1% since 2015. Nebraska's business share was 31.7%, which was down 3% over the previous five years, and the highest reported business share was Oklahoma, with 41.8%, which was down 2% since 2015. These statistics demonstrated minimal growth within the manufacturing industry. The Bureau of Labor Statistics (2019) showed that the four states of interest in the central United States, depicts an increase in turnover or job availability from 39.7% in 2014 to 44.9% in 2019.



This trend demonstrates the possibility that increased turnover may be influencing growth in the small manufacturing industry.

Research Purpose

The purpose of this study was to analyze the relationship between leadership behaviors, employee performance, and turnover intentions of small manufacturing businesses in the central United States. The focus of this quantitative examination, using scaled instruments, was to analyze the relationships, through hypotheses, of leadership behaviors in small manufacturing firms in the central United States. Besides, the focus was to determine statistically, any relationship between leader behavior, task performance, and employee turnover intention, as reported by the employee (subordinate perspective) during the study. This study defines leadership behaviors as behaviors identified by the MLQ instrument, such as transformational, transactional, and passive-avoidant. This study defines task performance as criteria that determine the quality, quantity, and efficiency relating to an employee's job function. Finally, this study defined turnover intention as the probability that an employee will leave the job based on the criteria of the TIS instrument.

Research Questions

The goal of this study was to quantitatively examine data on small manufacturing firms for responding to the business problem. Small manufacturing firms in the central United States need to understand why turnover intentions exist and how leadership behaviors influence task performance and turnover intentions. To determine the best approach to understanding the



business problem was first to recognize the leadership behaviors that exist at the management level. Second, establishing task performance criteria used for identifying success and, finally, the criteria used for minimizing turnover and whether there is any relationship to leadership behaviors that could prove meaningful for competitive advantage at some companies (Abdelgawad, Zahra, Svejenova, & Sapienza, 2013).

The business problem under investigation is the gap in the literature specific to small businesses, from the context of leadership behaviors and how the behaviors influence task performance and turnover intentions. The goal of this study was to apply quantitative research methods using scaled instruments that measure the dependent and independent variables and determine the relationships among them. The lack of literature related to leadership behaviors, task performance, and turnover intentions for small manufacturing businesses, influenced the need for this study as well as the development of the research questions.

RQ1: To what extent does transformational leadership influence turnover intention?

RQ2: To what extent does transactional leadership influence turnover intention?

RQ3: To what extent does passive-avoidant leadership influence turnover intention?

RQ4: To what extent does transformational leadership influence employee performance?

RQ5: To what extent does transactional leadership influence employee performance?

RQ6: To what extent does passive-avoidant leadership influence employee performance?



Rationale

A review of literature that encompassed research and theory from 2012 through 2019 provided the rationale for this study. Prior studies include both qualitative and quantitative methods. Quantitative methods using scaled instruments assist in understanding the relationship between leadership behaviors, task performance, and turnover intentions beyond the year 2019.

Prior research about leadership behaviors influence on task performance and turnover intention from a subordinate perspective is limited because of focal and geographical gaps and believed to be worthy of further study. Findings from new studies on this topic that address these gaps may assist businesses in determining decisions to adapt leader behavior when considering task performance. Besides, results may assist companies in decisions on turnover intention strategies.

Theoretical Framework

The theoretical frameworks highlighted by Bolden et al. (2003), which include trait, behavioral, situational, leader, and follower, and dispersed, were examined in this study.

Researchers use the theses factors to determine the association between leadership behaviors and motivation, as well as psychological elements that play a role in the manifestation of actions.

Specifically, steps that increase performance and decrease turnover through models such as McGregor's Theory X & Theory Y managers and Fiedler's contingency model. The approach to this study is based on the research questions and are objective measurements generalized across the relevant population (University of Southern California [USC], 2017). Findings from



previous research and new questions regarding the social dynamics of leadership behaviors, enhance leadership studies from a subordinate perspective (Guo, Dai, & Yang, 2016).

Considered were elements theorized to have an influence on the motivational actions of followers as well as task performance and turnover intentions.

Leadership theory, as explored by Wells and Peachey (2011), shows that leadership behaviors such as transformational and transactional, have a positive influence on work teams and working environments. Positive influences are enhanced when leaders recognize that both behaviors are valid and that the effectiveness increases when both are implemented and balanced. There is also the element of satisfaction with the leader, which plays an integral role in determining turnover intention. Task performance theory assumes job performance to be behavioral, episodic, evaluative, and multidimensional (Motowidlo, Borman, & Schmit, 1997). Motowidlo et al. (1997) defined job performance as the aggregated value to the organization of the tasks performed over a standardized unit of time. Kim, Tam, Kim, and Rhee (2017) explored the turnover intention theory to understand the determinates of turnover intention. Kim et al. defined voluntary turnover intention as "individual movements across the membership boundary of a social system that is initiated by the individual" (p. 309). It refers to the final decision process to leave. Findings suggest that while positive perceptions of justice are not determinates of turnover intention, authoritarian leadership has a significant influence on turnover intentions.

Figure 1 presents a theoretical framework for this study, as it considers leadership behaviors, task performance, and turnover intentions and shows their hypothesized relationships,



such as will be tested in this study. Marked on the figure are the proposed hypotheses as discussed further in Chapter 3.

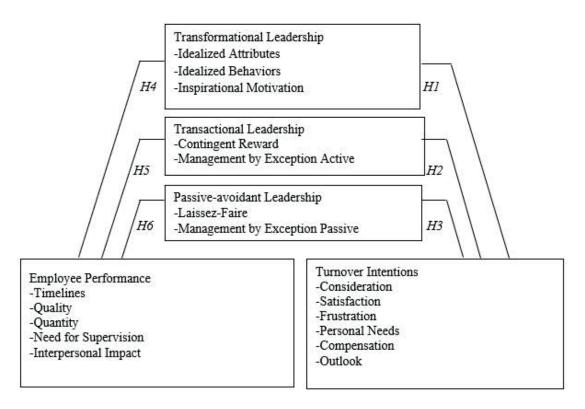


Figure 1. The theoretical framework for the research study.

Prior research indicated a need to examine leadership behaviors and motivational behavior from the perspective that psychological features may influence employee acuities. To provide relevance, the study presented by Gonzalez-Mulé et al. (2014) explored employee motivational tactics that guide individuals and teams toward high-level performance. Based on the research conducted by Lee et al. (2016), empowerment is a managerial behavior that is



purposed to share responsibilities and power. While empowerment from a conceptual perspective is associated with leading by example (i.e., taking responsibility, listening, and demonstrating respect), participative decision-making, and coaching, has been linked to transformational leadership and leader-member exchange theories (Lee et al., 2016). Lee et al. stated that since these two types of leadership, constructs are focused on the relationship between leader and follower, leaving empowerment as a stand-alone leadership construct. Figure 2 demonstrates the scope of the study and provides the reader with an understanding of particular interest, specifically leadership behaviors and relationship with task performance and turnover intentions in small manufacturing firms.

Theories and Concepts	Leadership behavior theory, task performance, and turnover intentions
Context	The influence of leadership behaviors
Methodology	Quantitative research methodology
Research Design	Multiple regression
Method	Online questionnaire
Industry	Consumer and commercial manufactured products
Company	Small manufacturing firms in central United States
Participant	Working level employees

Figure 2. Overview of research elements.



Significance

The significance of this study was to bring leadership theory (i.e., trait, behavioral, situational, leader/follower, and dispersed), relating to performance and turnover, current concerning small manufacturing businesses (Bolden et al., 2003; House & Mitchell, 1974). This contribution may have a significant influence on how leaders or managers of small companies address issues with performance and turnover as these leaders or managers may have more need than established large organizations. This study presented a need for research into the behavioral influence that leaders have on task performance and turnover intentions as there is limited literature available that examines these variables from a small market perspective that includes manufacturing. To that point, leadership plays a significant role in the daily operations of a business and provides influence that affects the organizational culture as well as task performance and behaviors (Iqbal et al., 2015). Because of this influence, it is critical that leadership influence is understood and how it affects employees. Organizations must consider leader behaviors for leveraging the best interest of the business.

This study presents to leaders of all levels, evidence that demonstrates the influence leadership behaviors may have on subordinate actions and the extent to which these behaviors have on task performance and turnover. Most notably, leaders are aware that performance is needed but have little insight about the actual steps necessary for execution to occur (Carroll, Levy, & Richmond, 2008). By expanding on the limited literature on leadership behaviors in small businesses concerning performance and turnover, leaders can begin to understand the

general practice in leadership rather than individual actions (Kempster & Gregory, 2017). These relationships may be of some value, especially to leaders or managers who possess a variety of behavioral traits. A new framework, based on a review of literature, is needed for determining leader or manager effectiveness versus other constructs.

An initial review of the literature revealed there was minimal reliable data on the status of small manufacturing businesses and relationships regarding leadership behaviors, task performance, and turnover intention. This topic was worth exploring to determine the perspectives based on employees as participants. This research provides knowledge on hypotheses outcomes use scaled instruments to understand what leaders or managers could consider for decision-making strategies in businesses. In summary, this study combined theoretical, methodological, and practical knowledge to provide insight into the relationship of leadership behaviors, employee task performance, and employee turnover intentions within businesses.

Theoretical

A theoretical perspective prepares for further understanding of leadership behaviors, task performance, and turnover intention in the business environment. A historical perspective on these theoretical frameworks further contributes toward strategies of change and profitability for businesses. This study's effort focused on the construct that leadership behaviors relate to how employees perform tasks, and leadership behaviors relate to employees' decisions to leave or remain in the current work environment.



Methodological

This quantitative study prompted the use of a questionnaire for collecting data on employee or subordinate perceptions of leaders, employee task performance, and employee intention to remain or leave the organization. The study used linear regression in testing hypotheses (relationship). Microsoft Excel 365 for Mac application contributed to further analysis. Measurement occurred using survey criteria that included Avolio and Bass's (2000) Multifactor Leadership Questionnaire (MLQ), Murdoch's (2002) adaptation of Wiedower's (2001) Task Performance Scale, and Bothma's and Roodt's (2004) Turnover Intention Scale (TIS-6).

Practical

Practical implications exist for this type of research. This study informs small and large manufacturing businesses with new knowledge for seeking to make changes on how to develop leaders. This study also advises firms seeking to make changes regarding employee task performance. Besides, this study informs businesses trying to make changes regarding employee turnover intentions.

This study adds to the body of knowledge by considering these relationships from the subordinate perspective. This research expands on literature mostly related to large organizations and introduces a view of leadership constructs to small businesses interested in evaluating employee, manager/leader relationships, and business strategies.



Definition of Terms

Bifactor model. Combines two specifications and allows the general hypothesis to be maintained (Lorenzo-Seva & Ferrando, 2018).

Leadership behaviors. Leadership behaviors refer to the theoretical mediating mechanisms that constitute the thought processes and actions displayed by leaders relative to the situation (Gottfredson & Aguinis, 2016).

Task performance. Task performance refers to an individual's effectiveness in completing core and job-role responsibilities (Kehoe, Lepak, & Bentley, 2018).

Turnover. Turnover refers to a number or percentage of employees who leave an organization and are replaced by new employees (Mayhew, 2018).

Turnover intention(s). The turnover intention is an employee's stated desire (could be more than one) to leave conditions of employment and unmet career expectations (Houkes, Janssen, de Jonge, & Bakker, 1999).

Assumptions and Limitations

Assumptions

The research in this study aimed to determine the extent to which leadership behaviors influenced task performance and turnover intentions in small manufacturing businesses in the central United States. An assumption before beginning the study was that the individuals would answer the questions honestly and completely. There was no evidence or feedback presented that individuals were not honest or incomplete in answering questions during the study.



Additional assumptions were that interest in participation was sincere and without an ulterior motive and that objectivity was maintained (Wargo, 2015). There was no evidence or feedback presented during the study that implicated any ulterior motive and or otherwise regarding objectivity. The informed consent form aided in these assumptions as it provided an exit strategy for participants that no longer wanted to participate as well as provided expectations related to completeness and anonymity. Qualtrics, a supporting and reputable company, performed honest data collection based on the researcher's IRB approved criteria.

Limitations

The core limitation of this study is that the sample may not have adequately represented the at-large population. Instrument delivery posed a threat to anonymity as there was a higher threat based on smaller sample groups. Instrument delivery time constraints may have also conflicted with participant schedules and other various activities that would otherwise not be an issue. The instruments provided a limited range of responses that may not have encompassed the entirety of behavioral analysis as well as participant perceptions.

A supporting and reputable organization delivered data collection instrumentation to participants and proved to be an effective strategy for protecting participant identity and eliminating potential bias. There were time and budget constraints in the data collection phase of the study. One-week scheduling presented an opportunity for data collection as an attempt to mitigate workplace distraction. The limited schedule minimized infringing on participant

personal time. A significant limitation to this study was the sampled population, considering that while there was plenty of time allowed based on the number of questions, this study does not account for individual lifestyle, work-life balance, varying shifts, and internet access. The final limitation was that the central United States is comprised of more than the four states examined in this study.

Organization for Remainder of Study

The remainder of this study concludes with four additional chapters. Chapter 2 offers a substantive and extensive literature review that highlights where the research has been and how the research is trending to provide a foundation for the business problem as well as academic justification. Chapter 3 provides insight into the method chosen, a rationale for the design and instrumentation, and discussion on the procedures and techniques used to gather and review the results. Chapter 4 provides the reader with a high-level analysis of the results, study findings, and qualitative reasoning, and Chapter 5 provides a conclusion to the study and analysis. Also emphasized in the conclusion are implications and future research recommendations.



CHAPTER 2. LITERATURE REVIEW

Introduction

This chapter discusses the reviewed literature in detail and is structured based on the variables of interest. The subheadings are organized as leadership behaviors first because this study indicated leadership behaviors as a determinate in employee task performance and turnover intentions. Second, the remaining subtitles of task performance and turnover intentions are combined with small manufacturing businesses since small manufacturing is the focus of this study and not to intermingle with companies of a broader scope.

Understanding how leadership behaviors contribute to task performance and turnover intentions allows leaders to make better, well-informed decisions when determining the best approach to leading individuals toward personal and organizational growth. Five themes support the premise that leadership behaviors directly contribute to task performance and turnover intentions. The first is that management support provides employees with a sense of direction and the necessary tools to succeed. The next is intrinsic motivation, in which the leader can identify what motivates an individual and lead accordingly. Empowerment is the level to which the leader affords employees the right to make decisions, increasing performance, and eliminating any desire to leave. Work engagement is when the leader provides the employees with meaningful work that captures attention and offers visible influences on the organization's expectations. The final theme is employee development. Development describes continuous training, cross-training, and special projects that build skills necessary for advancement. Core



and seminal literature support each theme that discusses the variables of the study, which include leadership behaviors, task performance in small manufacturing businesses, and turnover intentions in small manufacturing businesses.

This chapter offers an overview of the small manufacturing industry in the central United States as the context for the research study, specifically, in the states of Nebraska, Kansas, Oklahoma, and Missouri. The final section will summarize significant themes and concepts from the literature that lead to Chapter 3, which focuses on methodology. Figure 3 demonstrates the strategic fit for the study. The chart displays the variables under investigation, theories that provided direction, critical factors that influence the variables, and the research gap that validates the need for such a study.

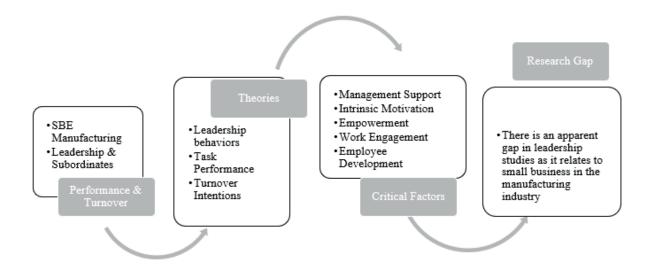


Figure 3. Overview of strategic fit for the study.



Methods of Searching

The strategy for conducting the literature review involved using the Capella library of journal articles, books, and dissertations to locate relevant literature that was specific to the variables under examination. Additionally, searching strategy included government websites, such as Small Business Administration, U. S. Bureau of Labor Statistics, U. S. Census Bureau, U. S. Department of Education, and U. S. Department of Health and Human Services.

Bibliography mining within the reviewed literature provided a deeper understanding of historical trends on the topic. Literature reviews provided an understanding of what prompted the study, and an understanding on how the study compared to its contemporaries, and the results. Finally, the literature provided relevant frameworks for the design of the study.

Theoretical Orientation for the Study

This study sought to bridge a gap in leadership studies related to the influence that leadership behaviors had on task performance and turnover intention within small manufacturing businesses. The study was guided by leadership behavior theory, task performance theory, and turnover intention theory to understand how such behaviors impact support systems, motivation, empowerment, work engagement, and employee development. The research on small business and leadership behaviors compared the relationships against those found by Kim et al., (2017) and those found by Wells and Peachey (2011). Prior descriptive research (Jing & Avery, 2016; Mishra, A. K., Mishra, K. E., & Grubb, 2015) assisted in developing an understanding as to how leadership behaviors influence task performance and turnover intentions from a practical



perspective. There were three major contributions for determining leadership behaviors, task performance, and turnover intentions. The multifactor leadership questionnaire (Avolio & Bass, 2000) provided a thorough examination of leadership behaviors, while Murdoch's (2002) adaptation of Wiedower's (2001) task performance scale examined how employees perceived their task performance. Finally, turnover intention was examined with Bothma and Roodt's (2004) turnover intention scale. The combination of theoretical literature, practical literature, and relevant instrumentation provided substantial understanding and data to allow small business leaders to make better business decisions to increase performance while decreasing turnover.

Review of the Literature

Overview of Core and Seminal Literature

The core literature covers more recent theories and concepts related to leadership, task performance, and turnover intentions. Authors such as Iqbal et al. (2015), Jing and Avery (2016), and Chang (2016) demonstrated the influence that effective leadership strategies have on employee performance, insight on how the leader-follower relationship impacts the organization, and the importance of empowerment and motivation.

Literature was chosen based on its relative newness and how it supports the overarching frameworks this study aimed to identify. Considering this study is interested in leadership, performance, and turnover, the literature is reflective of those elements as well as articles that demonstrate the relationships from a small business perspective. As shown in Table 1, the core works are presented from the literature review. Similarly, the seminal literature covers abstract



foundational theories and concepts related to leadership, empowerment, development, and conditional elements demonstrated by employees according to leadership influence. Table 2 shows the seminal works considered in the literature review.

The study by Chang (2016) sought to examine the processes that link high-performance work systems to organizational ambidexterity. Organizational ambidexterity refers to management's ability to manage efficiently and adapt to change. Like Chang, the current study also found that performance and ambidexterity are linked and that transformational leadership provided the appropriate climate for autonomy and empowerment.

Table 1. Overview of Core Literature

Author	Title	Journal
Chang (2016)	High-performance Work Systems, Joint Impact of Transformational Leadership, Empowerment Climate, and Organizational Ambidexterity	Journal of Organizational Change Management
Dunne et al. (2016)	The Impact of Leadership on Small Business Innovations	Journal of Business Research
Iqbal et al. (2015)	Effect of Leadership Style on Employee Performance	Arabian Journal of Business and Management Review
Jing and Avery (2016)	Missing Links in Understanding the Relationship Between Leadership and Organizational Performance	The International Business & Economics Research Journal

Dvir et al. (2002) tested the influence transformational leadership had on follower development and performance from a training perspective. The key finding in the Dvir et al. study provided a context to examine in the current study as they found that transformational



leadership was able to diffuse motivational, empowerment, and moral decline. Similarly, the current study found that employees reported fewer negative scores for behaviors related to transformational leadership from a contextual perspective. While the current study did not explicitly examine workplace stressors, findings are consistent with previous research. Specifically, scores demonstrating higher degrees of transformational leadership correlate with organizational identity and general happiness with their current environment.

Table 2. Overview of Seminal Literature

Author	Title	Journal
Afshari and Gibson (2016)	Instrumental Leadership: Measurement and Extension of Transformational—Transactional Leadership Theory	The Leadership Quarterly
Breevaart et al. (2014)	Daily Transactional and Transformational Leadership and Daily Employee Engagement	Journal of Occupational & Organizational Psychology
Dvir et al. (2002)	Impact of Transformational Leadership on Follower Development and Performance: A Field Experiment	Academy of Management Journal
Katou (2015)	Transformational Leadership and Organizational Performance	Employee Relations

Leadership Behaviors

The study of leadership behaviors began in the late 1950s pioneered by Douglas McGregor. He started looking at performance appraisal and, in the 1960s, published several papers related to professional managers, the human side of enterprise, motivation, and developed the XY theory in 1957 (Lawter, Kopelman, & Prottas, 2015). In 1974, House and Mitchell



discussed motivation as a critical component of leadership. These researchers devised checklists for defining proper leadership behaviors that include people management, strategic management, personal characteristics, and process management. These checklists culminated in the Path-Goal Theory of Leadership, of which many of the principles continue in new business environments (House & Mitchell, 1974).

Leadership is a process that maintains a certain level of influence within a group to achieve goals (Guo et al., 2016). The literature suggests that leaders and managers experience various types of impacts. This study aimed to examine how leader behaviors influence task performance and turnover intention. The research demonstrates variable segments of actions that include relational actions and the juxtaposed alienation effect (Guo et al., 2016). Other sectors of behavioral properties such as motivation, diversity, and dissonance will be discussed to at least consider how to subordinate perceptions formed with observed leader behaviors.

Diversity in leadership has an influence on decision-making processes and the organization's effectiveness (Pedraja-Rejas, Rodriquez-Ponce, & Rodriquez-Ponce, 2006). The authors further stated that two thought processes are essential to consider regarding the organizational outcome. The first thought process takes the approach that the environment will determine who is successful (ecology of organizations theory), and the other method states that management determines success (upper echelons theory).

As an alternative to the ecology of organizations theory, Pedraja-Rejas et al. (2006) use the upper echelons theory to view leadership styles as structural determinates. Consistent with



previous studies, the research confirmed leadership styles as an influence on group efforts, social climate, and organizational outcomes, which, in turn, increases creativity and productivity.

Pedraja-Rejas et al. made mention that while several styles of leadership exist, determining if one is superior to another is not possible.

As a means to simplify the various styles observed, Pedraja-Rejas et al. (2006) highlighted three types of leadership; participative, instrumental, and supportive. The study provided a questionnaire to 432 upper and middle management from small firms in Tarapaca, Chile, of which 126 responded. For participative leadership, the survey included a 7-point Likert Scale that measured consideration of participant opinion, the original idea of the participant, concerns of the participant's suggestions, considers the participant's differences in beliefs and asks for all participants points of view (Pedraja-Rejas et al., 2006). For supportive leadership, a 7-point Likert scale was used and adapted to measure whether team members were willing to collaborate continually. A factor is a consideration of the participant's well-being, whether the participant is relatively treated, and whether the team members have a comfortable environment and work climate (Pedraja-Rejas et al., 2006). Finally, instrumental leadership uses a 7-point Likert scale that was adapted to measure what each team member should do, how the team performs tasks, the standards expected for achievement, and work to be performed (Pedraja-Rejas et al., 2006).

Pedraja-Rejas et al. (2006), observed participative leadership at a moderate level, while supportive and instrumental leadership were highly prominent and not existent, respectively.



Relating to small businesses, the findings suggest that leaders should exhibit collaborative behaviors, operate in a positive work climate, and treat members fairly (Pedraja-Rejas et al., 2006). The findings suggest that leaders of small businesses should refrain from enacting achievement standards without member input and that collaboration is more effective when making decisions. While the prior study was related to leadership styles, many of the questions exhibited behavioral contexts. Compared to contemporary theory, there has not been much fluctuation between path-goal theory and upper echelons theory.

Historically, researchers were interested in how leader behaviors enhanced follower performance as well as the degree to which there is performance enhancement across various types of actions (Gottfredson & Aguinis, 2016). Gottfredson and Aguinis further cited that an important question to understand is, why do' positive' leadership behaviors improve follower performance? For there to be sound theory, this question must be understood. Gottfredson and Aguinis further stated that without this understanding, the opportunity to provide accurate and actionable recommendations would be limited. Gottfredson and Aguinis revealed that when spread across the most used leadership behaviors, leader-member exchange and relational leadership theories showed the most significant relationship. These researchers advocate a relationship exists between leader behavior and performance. The knowledge further shaped this study's effort. The following sections discuss the most common leadership styles along with notable studies as a means to understand the nuisances that exist between methods and to illustrate the overlaps that exist in behavioral components.



Transformational leadership. Regarding participative, supportive, and instrumental leadership styles (Pedraja-Rejas et al., 2006), early researchers noticed the convergence of new leadership genres, specifically, transformational, transactional, and visionary (Dvir, Eden, Avolio, & Shamir, 2002). Comparing the leadership genres and styles, participative leadership is similar in definition to charismatic, supportive leadership is similar in meaning to transformational, and instrumental leadership is similar in description to visionary. Dvir et al. (2002) conducted a study on transformational leadership, which emphasizes employee development, citing that management leveraged employee's current abilities and commitments to fulfill future responsibilities. At the same time, transactional leaders expect employees to reach agreed-upon objectives, and that assumes the responsibility for development (Dvir et al., 2002). Dvir et al. cited that there is no evidence to support the long-term effects of leadership's influence on employee motives, desires, and values, validating that the study responds to the absence of a theory that examines the developmental properties of transformational leadership.

Dvir et al. (2002) conducted a study in two phases. The first phase included 160 cadets from 12 training squads that participated in experimental and controlled leadership workshops before becoming leaders. Phase two included 54 platoon leaders, of which 32 participated in the experimental workshop, and 22 participated in the controlled workshop. Related to the previously mentioned participants, 90 NCO's, and 724 recruits, all between the ages of 18 and 22, were included (Dvir et al., 2002). The researchers used a battery of Likert type scales for determining outcomes. Measuring for outcomes included (a) self-actualization, (b) follower's

extra effort, (c) internalization, (d) organizational values, (e) collectivistic orientation, (f) critical and independent thinking, and (g) active engagement. Also, the researchers measured post-experiment results with multivariate analysis techniques such as MANOVA, MANCOVA, and ANOVA. The researchers measured the effect size, calculated correlations, and used the resulting binomial size to determine the impact of the treatment (Dvir et al., 2002). The researchers further conducted simple effects tests for each condition that exhibited significant interaction of treatment by occasion. According to Dvir et al. (2002), to limit Type II error, Sauley's and Bedeian's recommendation from 1989 was used to interpret results. According to Dvir et al. (2002), per the test to minimize the occurrence of type II error, if the results were more than .10, a trend in data was determined.

The participants in both conditions demonstrated positive regard toward the leadership training, and the experimental group attained more knowledge on transformational leadership than the control group (Dvir et al., 2002). Dvir et al. further stated that a third manipulation check measures the level at which training produced more transformational leadership behaviors among the experimental group. Data demonstrated that there was significant interaction for platoon leaders and little to no significance among the recruits (Dvir et al., 2002). This study by Dvir et al. found that there is a positive influence related to transformational leadership on indirect followers. The results show that transformational leadership enhanced motivation, morality, and empowerment on at least one measurement; however, Dvir et al. revealed that the

study was limited to the idiosyncratic nature of the military, and civilians should identify as participants to replicate the study.

According to Humphrey (2012), transformational leadership is a relationship in which the leader and follower experience certain aspects of change that coalesce into a shared purpose. Previously eluded to by Dvir et al. (2002), Humphrey also cited that motivation and encouragement are significant outcomes of transformational leadership as designed to take employees beyond the minimum expectations. In 2012, Humphrey compiled data from 128 study participants who were employed in Kansas and Missouri. Humphrey investigated the mediating effects of organizational identity on transformational leadership and organizational citizenship behaviors.

Despite transformational leadership possessing a negative relationship with organizational identity, further research found that there is a positive relationship between transformational leadership and organizational citizenship behaviors, which is consistent with previous research. According to Humphrey (2012), this positive relationship is because of elements such as role modeling, building trust, and motivational behaviors, and the ability to show concern for followers. The study by Humphrey also found that there may be evidence to support that while widely recognized, leadership influences attitudes and behaviors, it may also be dependent on both the situation and followers (Humphrey, 2012). Consistent with Pedraja-Rejas et al.'s (2006) upper echelon theory and ecology of organizations theory, Humphrey illustrated that not one leadership behavior is better than another. The results show that



transformational leadership may not be the optimal approach, as there was a weak correlation between transformational leadership and organizational identity. Based on the results of the study and consistency with previous research, Humphrey (2012) suggested that future research should include an experimental-longitudinal design to explore causality further. Humphrey advocated exploring the different elements of identification as they relate to affective, cognitive, and evaluative behavioral components.

To further the research about transformational leadership, Katou (2015) investigated the mediating elements of organizational trust, justice, and employee reaction relating to transformational leadership and performance. While research about transformational leadership goes back decades, this research offers a unique view as the elements under investigation are relatively untapped. The study included a questionnaire survey to 400 public and private organizations in Greece that had a minimum of 20 employees. The study deployed 3,200 surveys, and 1,250, from 133 organizations, were returned usable. The internal consistency of the instrument was validated using Cronbach's alpha, in which the tool proved to be valid as all measures returned higher than 0.70 (Katou, 2015). To further test the instrument reliability, evaluation of the percent of total variance for each dimension was measured using confirmatory factor analysis and varimax rotation, which should yield results greater than 1. The actual results exceeded 50%, deeming the instrument reliable. In addition to reliability and validity testing, Katou noted the importance of screening for conventional methods bias and multicollinearity.



Each of these tests resulted in the data falling into tolerance limits, demonstrating that no significant bias exists in the study (Katou, 2015).

Post analysis findings show that transformational leadership and organizational trust partially and positively mediate by organizational justice. These results are due in part to the coefficients that were measured that demonstrate supportive transformational leadership has a more significant influence than that of developmental transformational leadership behaviors (Katou, 2015). A second finding suggests that there was also a positive yet partial relationship between justice and employee reactions. This finding was consistent with previous studies that found procedural justice has a more significant influence than either interactional or distributive justice. Katou confirmed that trust was a mediator in the relationship between procedural justice and variables such as satisfaction, organizational citizenship behaviors, and commitment. Katou demonstrated how well the transformational leadership and organizational performance model work, considering the economic turmoil that Greece has experienced. This fact further highlights the findings by Humphrey (2012) that state that the success of transformational leadership may be relative to employee reception and situation rather than on its inherent abilities and merits.

To determine the influence transformational leadership has on performance, Chang (2016) tested a model that examines high-performance work systems and organizational ambidexterity. Chang cites that previous research is typically focused on the design and content of high-performance work systems as opposed to issues in implementation and employee



viewpoint. According to Chang, individuals who have a diverse set of tools or, in other words, are versatile, tend to have an ability to pursue different opportunities, can handle conflict, and can engage in meaningful paradoxical thinking. These 'tools' demonstrate that they can behave as generalists rather than specialists because of their wide range of knowledge, skills, and experiences (Chang, 2016).

The study conducted by Chang (2016) was within 79 units in 33 Taiwan computer and electronic firms with a total sample of 184 unit managers and 346 employees. Various sources provided data to eliminate conventional methods of bias. Specifically, the 346 employees rated ambidexterity, two senior managers from each firm ranked transformational leadership at a firm level, and three employees from each firm rated the empowerment climate (Chang, 2016). The data were analyzed with confirmatory factor analysis to test validity. The one-factor solution of high-powered work systems provided the best fit for the data with a comparative fit index of .92, incremental fit index of .92, and root means a square error of .05. According to Chang, in 2016, a 12-item Likert scale measured ambidexterity. High levels of agreement between employees of the same unit caused data aggregation. The scale was reliable based on an alpha of 0.90. Experience with high-performance work systems measured with a list of 44-items that incorporated a 7-point scale and identified unique dimensions of human resource systems. Validity and reliability occurred as the data demonstrated an alpha of 0.92, root mean of .90, and incremental fit index of .72. Also measured were the elements of empowerment climate and firm-level transformational leadership with existing instruments such as Blanchard et al. (1995),



Randolph (1995), Seibert et al. (2004), and Chang (2016). Each measure tested within an acceptable range with alphas of 0.85 and 0.89, respectively.

The post-study analysis illustrates that high-performance work systems, either firm or unit, are insufficient and insignificant to conclude ambidexterity in complicated organizations (Chang, 2016). Chang further cited that to deepen an understanding of the influence organizational ambidexterity has on single-level high-performance work systems, to perform analysis on the boundary mechanisms of both unit and firm levels. Chang confirmed that unit experience and climates conducive to empowerment, as well as high-performance work systems, foster empowerment, and ensures ambidexterity.

Dvir et al. (2002) cited that transformational leadership enables employees to reach maximum potential as well as emphasize development. Despite Dvir et al. finding no evidence to support long-term influence on employee motives, desires, and values, a decade later, Humphrey (2012) found that motivation and encouragement are elements of transformational leadership. These findings may be because of a relationship in which the leader and follower experience certain aspects of change that coalesce into a shared purpose.

It is considering that Humphrey (2012) found a negative relationship between transformational leadership and organizational identity, variables that relate to organizational citizenship behaviors, or any definite behavior pattern found to be positive in each study. The trend continues regarding transformational leadership's influence on work-related behaviors, as evidenced in Katou's (2015) study. Katou found that even in an environment that is



experiencing economic turmoil, transformational leadership can have a positive influence on performance, motivation, and commitment. Finally, as global business becomes more volatile and ever-changing, ambidexterity, or flexibility to adapt to changes will more than likely determine the successes experienced by an organization. According to Chang (2016), few studies have focused on performance and ambidexterity from an employee perspective. When considering that performance, motivation, and commitment can all be skewed by the employee's perception, equipping employees with a diverse toolbox of abilities is essential (Chang, 2016) so that they become ambidextrous at all levels of the organization an exhibit high levels of performance and workplace commitment. These findings show that employees with diverse abilities add to organizational identity, an area of behaviors that provide little correlation to transformational leadership and its relationship to performance and turnover.

Transactional leadership. Transactional leadership was first observed in 1947 under the name rational-legal leadership and based on a theory that people are not able to motivate themselves and cannot function without structure (Spahr, 2016). Based on this simple definition, how transactional leadership became the preferred method of the military after World War II is understandable as well as and remaining a widely used style in large corporations, especially when employees may not speak the same language (Spahr, 2016).

In the 1980s and 1990s, Bass, Howell, and Avolio created three dimensions of transactional leadership that include contingent reward, passive management by exception, and active management by exception (Spahr, 2016). Spahr further highlighted that transactional



leadership is more likely to be successful in crises or on projects requiring continuing efforts. Transactional leaders are those who value structure and order and are typically managing large corporations and global projects (Spahr, 2016). In environments where creativity and innovation hold a higher value, Spahr's research suggested that transactional leaders would not be a good fit because of the strict adherence to structure and the environment that depends on employees being self-motivated. Spahr further supports that transactional leadership is results-oriented as the successes measure the organizations' reward/punishment system. According to Spahr, in contrast to transformational leadership, being geared more toward influence and selling, transactional is geared toward reinforcement and telling. Relating to the characteristics of a transactional leader, Spahr contended that these types of leaders focus on short-term goals, rules, and efficiency. Spahr further stated that transactional leaders are not flexible and are opposed to change.

From a theoretical perspective, transactional leadership is easy to deploy, as there is very little training required because of the follow the rules or deal with the consequence's rationale (Leadership Central, 2016). Additional elements related to the theory include; minimal hierarchy complexities, based on tested methods on human responses, and no hindrances related to emotional, intellectual, or task complexity, and its expeditious nature. Alternatively, this leadership model assumes that everyone is rational and that reward and punishment motivate all people (Leadership Central, 2016). As far as potential issues that can debilitate an organization,

Leadership Central cited that these leaders have limited control over financially sound employees that can quit as well as its ability to foster destructive competition and its subjugated nature.

Contrasting arguments from Tyssen, Wald, and Heidenreich (2013) suggested that transactional leadership and transformational leadership are complimentary as transformational is the preferred style when rewards and punishments are no longer useful. Tyssen et al. aimed to create an understanding of how successful transactional leadership is within temporary organizations, citing that previous research demonstrates that transactional leadership as preferred during times of high stress and weak social relations. Consistent with their contemporaries, Tyssen et al. declared that transactional leadership is the basis of all organizational leadership as it stresses the need for resource efficiency and operational consistency. Despite the study supporting all posed hypotheses, future research needs to provide a more objective measurement for complexity, commitment, and success. Tyssen et al. suggested further validation by incorporating the full complement of measurement tools as the instruments used were only partial scales for measuring transformational and transactional leadership. Tyssen et al. also found that while both leadership styles were proven effective within the study parameters, researchers need to take notice of the full spectrum of leadership behaviors as they relate to the current situation.

Supporting Tyssen et al.'s (2013) comments on the broad-spectrum analysis of leadership behaviors, Afshari and Gibson (2016) revealed the full-range leadership theory as possessing two significant influences. One is a bifactor model that measures structure initiation and



considerations. According to Lorenzo-Seva and Ferrando (2018), the bifactor model combines the unidimensional model and the correlated-factors model. This combined model allows general hypotheses to be maintained while modeling additional variance with group factors. The bifactor model, while not used in this study as a measure, provided insight into the correlation of variables when measured as groups and independent of each other. The second is a transformational-transactional theory that focuses on the charisma component of transformational leadership. Consistent with Spahr (2016) and Tyssen et al. (2013), Afshari and Gibson (2016) further the concept that transactional leadership is contingent on reward and influenced by management-by-exception. After evaluating the MLQ items, Tyssen et al. (2013) determined that leader actions identify employee roles and provide a reward, while work facilitation and the outcome are not present (Afshari & Gibson, 2016). Afshari and Gibson also cited standards, and structure initiation to be indicative of management-by-exception, citing the limited data to support the extent that full-range models overlap with structure. The introduction of instrumental leadership as a new construct, the study yields results that support transactional leadership as a prototypically *right* leadership style that is said to be on-par with transformational leadership and other related constructs (Afshari & Gibson, 2016).

According to Antonakis and House (2014), transactional leadership is considered part of a full-range theory that focuses on the fulfillment of the organization's mission while facilitating innovation, adaptation, and performance. Antonakis and House aimed to further research leadership from commitment and performance perspective rather than the social and economic

exchanges of their contemporaries. Regarding full-range theory, evidence suggests that predicting performance depends on whether performance is measured objectively or subjectively. A majority of the research uses the Multifactor Leadership Questionnaire (MLQ), considering the instrument is best known and validated for full-range theory. The questions remain whether the theory accounts for all leadership aspects, whether there have been any leadership classes omitted from the method, and are the factors that constitute full-range theory overstated? Leadership is more than influencing actions at an interpersonal level, but also incorporating strategic management into the environment, which allows the leader to monitor team outcomes through the identification of strategic and tactical goals (Antonakis & House, 2014). Based on the belief that leadership should extend beyond the interpersonal and demonstrate expertise in a strategic business, changes the leadership dynamic from influencer to an instrumental to which the leader exhibits expert-based power Antonakis and House (2014). Antonakis and House stated that instrumental leadership is not included in the full-range theory and not measured.

Antonakis and House (2014) illustrated the influence that effective leaders have on internal and external organizational environments, aside from the traditional functional perspective. Antonakis and House further stated that practical actions include the monitoring of activities and the implementation of solutions. While these actions were the normal function of leadership, the dynamic nature of the business, as well as the pressures that arise from global competition, Antonakis and House noted that leaders are stepping in to ensure organizational

goals. This ideology ties back to instrumental leadership by which Antonakis and House state that functionally, leadership is organizational problem-solving, and without the required skills and expertise, leaders cannot be valid. In the context of small business and owner-operated businesses, there may be a lack of practical leadership skills. Past research demonstrates that strategic structuring and planning, providing direction and resources, monitoring change, monitoring performance, and giving feedback are not included in the full-range model (Antonakis & House, 2014). To further this observation, the authors cite that effective leaders must perform activities outside of the normal function of vision, support, and encouragement and that task-oriented behavior that includes setting goals, planning, and monitoring.

According to Breevaart et al. (2014), transactional leaders motivate followers by setting the expectation and managing the expectation. This motivational method is in contrast to transformational leadership, which motivates followers to perform beyond the expectation. Transactional leadership consists of components that have differing levels of effectiveness. These components may include contingent reward and management by exception, both of which influence follower levels of commitment, loyalty, and satisfaction. Under transactional leadership constructs and contingent awards, the rewards must be a material such as a raise; however, if the rewards are psychological, such as recognition, the leadership style would be considered transformational (Breevaart et al., 2014).

Management, by exception, can be split into two parts, active and passive. Active anticipates that mistakes will be made, and enforces rules to limit mistakes, while passive means



speaking with followers about their errors and expressing dissatisfaction with their mistakes (Breevaart et al., 2014). Despite limited research about the influence of leadership behavior and follower work engagement, past researchers argued that transactional leaders lack inspiration and challenge. In contrast, Breevaart et al. cited that follower engagement is relative to the leader's output; however, to a lesser degree than that of a transformational leader. Breevaart et al. stated that while previous researchers focused on personal resources, their study focuses on the mechanism of job resources as the resources can possess the potential to motivate, which can lead to increased engagement. Breevaart et al. also highlighted that in this study, transformational leadership viewed as a long-term construct as vision-oriented and transactional leadership viewed as a daily occurrence. This finding is evident, as cited by Breevaart et al., that engagement is relative to the leader's output, or those followers are more engaged when there are more resources available, and the leader is active in role. In other words, transformational leadership is motivating followers to achieve long-term goals. At the same time, transactional leaders motivate followers to achieve short-term goals with the hope to reach the long-term vision. Breevaart et al. concluded that contingent reward and transformational leadership demonstrate positive engagement and work environments. In contrast, management, by exception, was found to have a negative relationship with both variables.

Authoritarian leadership. Authoritarian leadership means that leaders demonstrate firm control and authority over followers and demand respect (Shu, 2015). This level of control requires followers to maintain positive relationships with their leaders, satisfy obligations, and

demonstrate loyalty to the organization. Shu stated that this dyadic relationship is reflective of interdependence and that the leader supports the followers need to relate to others with high levels of interdependence. Considering that interdependence is fundamental to positive organizational outcomes, understanding the relationship between satisfying the group's needs rather than one's self is essential (Shu, 2015).

This leadership style welcomes and expects blind faith, as stated by Schuh, Zhang, and Tian (2013) as the style is associated with unilateral decision-making and absolute power that provides the ability to control the direction of the group and the outcomes. Concerning engagement, Shu (2015) highlighted that authoritarian leaders might discourage worker engagement as the leader tends to draw focus on the follower's weaknesses, which over time, can impair competencies and create deviant behaviors. Schuh et al. further illustrates this line of thinking as they cited that this type of leadership typically disregards follower interests and suggestions as well as downplaying their contributions to the organizational goals.

Dedahanov, Lee, Rhee, and Yoon (2016) found that under authoritarian leadership, employee voice is limited, which may have implications for creativity. While employee voice and authoritarian leadership are not necessarily of importance to this study, the relationship exists between the behaviors associated with this leadership style. Notably, the influence on the follower and the influence on performance and turnover intentions provide essential dialogue for the study. Dedahanov et al. cited that authoritarian leadership tends to exhibit strict discipline, which may cause a follower to be reluctant to share concerns or suggestions for improvement



because of potential punishment. This lack of freedom in work, thinking, and behavior (Dedahanov et al., 2016) may play a role in innovative qualities deemed critical in the sustainability of small businesses, especially manufacturing.

The study's outcomes demonstrate that no perfect leadership style exists and that much of what employees react to and deem essential to success lies in the behaviors of the leader. The literature throughout this section suggests that effective leadership relies on the management of people, strategy, and processes (House & Mitchell, 1974), and an essential element is that of employee's perception and reception.

Small Business and Manufacturing

Prior literature does not address small business and manufacturing often at the same time; however, according to Murray (2016), small scale manufacturing firms can be found in all 50 states. The American Small Manufacturing Coalition (ASMC) is one of many organizations that lobby for government assistance and federal programs to generate sustainability and competitive edge for small businesses.

One advantage of small manufacturing is that organizations become a niche market where consumers can purchase unique or personal products that would not generate a profit for a large firm. Operating in a niche market, according to Murray (2016), offers smaller firms the ability to operate with little or no competition. Murray also noted that large firms commonly have personnel experienced in all facets of the organization. Such as sales, marketing, and logistics, where small businesses can benefit from companies that make software available to



help small firms operate with little knowledge of the entire process (Murray, 2016). Small manufacturing firms can operate with little to no competition as well as maintain the ability to provide products to consumers on a personal level. The dynamic of leadership styles of small businesses should be explored with innovation since innovation drives competitive advantage and sustainability in large firms.

According to Bharati and Chaudhury (2006), small and medium business enterprises (SMEs) are a necessary component to the U.S. economy as they employ almost half of all employees in the private sector and generate up to 80% of new jobs on an annual basis. Bharati and Chaudhuri also stated that SMEs play a valuable role in innovation and competitiveness, citing that many small businesses are lacking in the adoption of technology, specifically technologies that take on roles that large corporations do with human capital. Examples of these technologies include value chain, information technology, operations, logistics, marketing and sales, services, and, most importantly, human resources. Similar to the study of Bharati and Chaudhury, the current study examined small businesses in the local area as the literature addresses the topic on a national level. They further cited that a firm's awareness and the adoption of technology may influence small business success.

Leadership in Small Business

Within the realm of small business, there is a plethora of relevant literature demonstrating the importance of leadership in small firms as a determinant of success as well as fostering an environment that is conducive to innovation (Dunne, Aaron, McDowell, Urban, & Geho, 2016).



Dunne et al. suggest that within small businesses, a lack of research exists that provides evidence that links leadership attributes to innovation. Further examination illustrates that while innovation is essential to small business survival, owners and management are prone to letdowns as they experience success and focus their attention on the wrong elements of their business.

Dunne et al. (2016) cite that when small firms experience success with innovation, they shift their attention to efficiency in production and sales, rather than continuous innovation.

For a firm to be innovative, leaders must leverage the knowledge, skills, and information from individuals as well as collectively to develop new products, services, and processes. Dunne et al. (2016) stated that existing literature shows individual characteristics, group characteristics, and job characteristics as three significant themes related to the innovation process. Of these themes, the perspective of job characteristics, complexity, is the most profound as research demonstrates that the characteristics of job complexity can have a positive influence on the worker psyche. These characteristics include autonomy, perceived value, and the ability to associate and identify with job outcomes. To realize the optimal levels of creativity within the collective, individual members must share knowledge and integrate the knowledge into the group as a means of generating trust, which opens creative potential. Leadership behaviors and styles directly influence the group's ability to operate with optimal creativity (Dunne et al., 2016).

As with many other elements of business, communication is essential to success and has a direct influence on innovation (Dunne et al., 2016). Motivational language, clear direction, and empathy had a positive relationship to realized innovation. Dunne et al. also suggested that



enhanced creativity is reinforced with positive feedback and recognition and theorized that leadership style, organizational efficacy, and environment play a significant role in new product and service innovation.

Leadership and human resource management have emerged as the new approach to employee management, taking the place of traditional methods such as personnel administration (Iqbal, Anwar, & Haider, 2015). This change in approach places importance on effective management techniques as they attempt to improve performance. According to Jing and Avery (2016), effective leadership behaviors can provide performance improvements as organizations confront new challenges. Jing and Avery also stated that the influence leadership behaviors have on performance have not been extensively studied.

As the literature provided further understanding of how leadership behaviors influence performance, Lee, Cheong, Kim, and Yun (2016) discussed how empowering leadership behaviors specifically influence performance. They cited that empowerment allows employees to participate in decision-making actively as well as become less reactive and more proactive in their way of thinking. Lee et al. noted that empowerment leads to autonomy and responsibility as well as an ability to take risks. Before the works of Lee et al. (2016), Randolph (1995) explored empowerment as a way of enhancing organizational dynamics. In contrast to Lee et al., Randolph stated that empowerment is not about providing employees with decision-making abilities because they already have this ability. Randolph further stated that the core of



empowerment is to harness the power employees already possess, such as knowledge and motivation, and release it into the organization.

Seibert, Silver, and Randolph (2004) continue the discussion as they provide context to the micro and macro perspectives of empowerment, for example, structure and policies and intrinsic motivation, respectively. Considering that in years before 2004, empowerment was viewed as a trend or fad (Maynard, Gilson, & Mathieu, 2012), empowerment maintained its roots in motivation, job design, and participative decision-making (Seibert et al., 2004). Related to this study, for empowerment and management techniques to remain productive and sustainable, more research is necessary.

The literature suggests a variety of leadership behaviors that constitute the full-range theory as a model. It widely recognizes the multifactor leadership questionnaire (MLQ) as a top instrument for exploring leadership dynamics. While this instrument does well at measuring leadership types, it falls short when introducing items such as innovation propensity (Ryan & Tipu, 2013). The mechanisms that constitute innovation, such as experimentation, novelty, and creativity, provide support for a competitive environment, and specialized terms such as propensity, organizational innovation, and innovativeness explain the concept of innovation. However, much like defining leadership, there is no mutually agreed-upon definition for innovation (Ryan & Tipu, 2013). In support of their hypothesis, Ryan and Tipu discuss the dimensions of influence and motivation concerning leadership behaviors and the instilling of



innovational values. Ryan and Tipu cited that leaders who demonstrate intellectual stimulation provide an atmosphere that encourages diversity in thinking that, in turn, generates creativity.

Murray (2016) cited that with technology, small business owners do not have to be knowledgeable in all facets of the business. Comparing this to the findings of Dunne et al. (2016) and Ryan and Tipu (2013), which include communication factors and behavioral factors respectively, it assumes that success in the small business arena and more specifically, manufacturing is quantifiable by the leader's ability to focus on the environmental factors. This assumption is further highlighted by Leitch and Volery (2017), as they introduce a new concept coined entrepreneur leadership. This leadership style, based on the author's description, is a hybrid style that incorporates behaviors typically found in transformational, authentic, and charismatic leadership styles. Leitch and Volery also implied that for many entrepreneurs, an entrepreneurial spirit is more a focus than leadership development. As an entrepreneur recognizes opportunities, creating the vision, leveraging resources, and creating value, the entrepreneur typically invokes behaviors conducive to innovation, which are also similar to those described as a determinate in increased performance and organizational identity, which reduces turnover (Leitch & Volery, 2017).

Turnover Intentions in Small Business

The context of small businesses should consider determinates of turnover intentions, empowerment climate, and job satisfaction. These are critical components because of the high costs associated with turnover, and the business owners need to establish the business amidst



potentially high competition. According to Seibert, Silver, and Randolph (2004), empowerment has become a movement since the 1980s. Considering that empowerment has roots in motivation, job design, decision-making, and self-management, existing literature supports the relationship between empowerment and positive outcomes.

When there are high costs associated with loss of production and efficiency, as well as the costs incurred by recruiting and training new employees (Li, Kim, & Zhao, 2017), this scenario can be crippling to a new business. Especially in the manufacturing industry, where competition is fierce despite possible niche markets. Li et al. were concerned with the casino industry. The premise of the study is on the 24-hour business cycle, which depending on demand, could become an issue in manufacturing. Li et al. cited that while working long hours, weekends, and holidays may impact the personal lives of employees, manufacturing may have added adjacent elements such as physical demands, seasonal fluctuations, and commitments from outside of the work environment. While attrition in a small business may not be as prevalent, absenteeism, downward trends in productivity, and low morale can predict turnover intentions.

Wells and Peachey (2011) investigated leadership and turnover within the NCAA and found a negative relationship between leader behaviors and turnover intention. While these findings are contradictory to common logic and existing literature (Li et al., 2017; Seibert et al., 2004), a skew may exist as the population included coaches of college athletics rather than

organizations. Despite this skew in population, managers recognize that behaviors can positively influence effective leadership and mitigate turnover intentions.

Similar to the assertions of Li et al. (2017), Waldman, Carter, and Hom (2012) discuss that losing highly skilled and talented employees can be attributed to high personnel costs that negatively influence organizational effectiveness, such as customer service. Waldman et al. stated that a single increase in standard deviation translates into a decrease in financial performance by 27%. Environmental pressures, such as push-to-leave, where job satisfaction and adverse events that occur in the workplace, play a role in an employee's turnover intention (Waldman et al., 2012). The other pressure that influences intent to leave is pull-to-leave, which is instigated externally by new opportunities or job alternatives. Intent to leave is highly dependent on the employment market, and that high unemployment rates deter employees from leaving (Waldman et al., 2012).

In contrast, low unemployment suggests that the market will be more competitive as organizations are willing to spend on gaining the best employees. Upon further investigation, Waldman et al. (2012) found that the literature neglected an alternative to push-to-leave and pull-to-leave. This alternative was coined pull-to-stay and is transcendent to job satisfaction and job alternatives. Considering the axiom, people quit bosses, not jobs, further justifies the need for the study as Waldman et al. cited that scholars have overlooked leadership antecedents to common predictors such as workplace attitudes and characteristics.

Mishra, Mishra, and Grubb (2015) support the adage that people quit bosses, not jobs, by stating that people leave jobs because of a lack of trust in senior management. Surveys suggest that trust is a significant component of effective human resource management (HRM) and that the employee perceptions of human resource practices serve as proxies of organizational trust and commitment. Social exchange theory, according to empirical research, shows trust in the organization mediates commitment, turnover, and performance.

Research about social exchange theory also provides support for behavioral components that play a role in turnover and performance outcomes. The literature demonstrates that leader behaviors play a significant role in an employee's intent to leave. Whether because of trust, leader attitude, job satisfaction, or external factors, the organization must have a plan of action to mitigate the loss of employees who have the skills to increase organizational performance (Li et al., 2017; Wells & Peachey, 2011).

Employee Performance in Small Business

Employee performance is contingent on capabilities, intelligence, and tacit organizational knowledge to maintain and expand competitive advantage (Ofobruku & Yusuf, 2016). The ability to remain competitive in manufacturing is crucial for small businesses as their competition typically have more resources. Small business provides a significant contribution to the economy as they employ a majority of the labor force, create new jobs, and engender a significant fraction of the gross domestic product (Ofobruku & Yusuf, 2016). Despite the



positive aspects that small businesses lend to the industry at large, many are unlikely to succeed (Chinomona, 2013; Ofobruku & Yusuf, 2016).

According to Ofobruku and Yusuf (2016), knowledge transfer and role modeling enhance employee development, and working relationships foster the transference of knowledge. These researchers further advocate that tacit knowledge transfer is a by-product of social processes that function in a mentor-mentee manner that facilitates personal growth or commonly referred to as the social exchange. Similarly, Chinomona (2013) discusses critical aspects that contribute to the failure of small businesses, citing that with employee knowledge and performance, there is a breakdown in conceptual knowledge that includes deficiencies in management acumen as well as entrepreneurial and marketing skills.

Approaching the concerns through a resource-based lens demonstrates that when maximizing competitive advantage, small businesses need to leverage resources such as physical and organizational capital and human capital as well as core competencies such as management, knowledge, skills, and behaviors (Chinomona, 2013). Chinomona further theorized that barriers to small firm success are because of an inability to select, develop, retain, and motivate employees. Chinomona stated that viewing small businesses through resource-based methods exhibits a firm's potential to sustain an advantage over large firms by developing and utilizing owner expertise and employee knowledge, which will increase employee and operational performance.



Ofobruku and Yusuf (2016) and Chinomona (2013) both stated that the key to increasing advantage is in improvements to employee training. Chinomona added that diverting resources to programs that address small business management and employee training has become commonplace for some countries and even more critical organizations. Taking into consideration that profitability and growth are related to employee development, extant literature also supports that education, training, and experience as distinguishing factors between successful and non-successful small businesses (Chinomona, 2013).

Continuing the discussion on competitive advantage, Andries and Czarnitzki (2014) provide commentary regarding innovation's influence on advantage and performance. Andries and Czarnitzki posited that there is a clear linkage between innovation and intellectual capital. These researchers are mainly concerned with the individual's ability to use knowledge resources. The knowledge management process views innovation as those new products and processes with the epithet of knowledge, citing innovative firms as knowledge-creating (Andries & Czarnitzki, 2014). As Chinomona (2013) stated that training and development are essential to success, Andries and Czarnitzki cited that some small business owners were not taking advantage of employee knowledge and are relied upon to be the innovative processor. In 2014, Andries and Czarnitzki asserted that small businesses seldom use programs related to innovative processes and human capital. Despite limited evidence, there is cause for concern that over-reliance on owner knowledge will limit employee performance, and ultimately, the firm's performance.



Leadership has emerged as a practical approach for managing both employees and the organization (Iqbal et al., 2015). Iqbal et al. further cited that human resource management replaces traditional administration concepts. This concept led to the integration of new leadership styles into the management of employees and believed to improve performance. Iqbal et al. noted the importance that effective leaders be diagnosticians and can adapt to the current situation. The different leadership styles can be in a way that best fits the employees and also based on the level of direction, empowerment, and decision-making that is required (Iqbal et al., 2015).

The study by Iqbal et al. (2015) looks at the leadership styles of autocratic and democratic as independent variables with participative as the dependent variable. Theoretical perspectives state that employee performance is directly related to the leader's ability to lead according to the situation and that the adoption will serve to stimulate performance (Iqbal et al., 2015). The study found that leadership styles have a significant influence on small businesses and large companies. Further, the styles affect all levels of the organizational hierarchy. Correctly, the styles play a role in the creation of culture. Regarding style adoption, the study found that this ability is necessary when there are time constraints for decisions. However, when there are complete alignment and motivation, participative and democratic leadership are adequate to meet objectives.

Jing and Avery (2016) continue the discussion by stating that there are numerous reasons why there should be a leadership-performance relationship. The reasons behind this need are



related to marketplace dynamics such as innovation, price, returns, and competencies, and states that leadership is at the core of performance improvements (Jing & Avery, 2016). Despite the contentious nature of leadership definitions, there is an argument that leadership links to effectiveness and performance. Jing and Avery also found that leadership behaviors enable improvement in capabilities and employee encouragement that increase commitment and satisfaction, all of which enhance performance. Because of the difficulties in the leadership-performance dynamics, conclusions are lacking regarding the extent to which behaviors and styles influence performance (Jing & Avery, 2016).

Despite the previous assertions of Lee et al. (2016) stating that empowerment leads to autonomy and responsibility as well as an ability to take risks, there is speculation as to whether empowerment lends itself to desired outcomes. This speculation on the notion that unregulated empowerment may have negative implications related to overconfidence that leads to tactical and strategic errors (Lee et al., 2016). Similar to Iqbal et al. (2015) insights on adaptation, Lee et al. cited that minimal and excessive empowerment may lead to dysfunctional performance or, in simpler terms, too much freedom may result in less than desirable outcomes. Despite this theory, research suggests that empowerment is related to job satisfaction, managerial effectiveness, turnover intentions, and creativity (Lee et al., 2016). The study conducted by Lee et al. provided 250 surveys to professional level employees and their direct supervisors. Of the 250 surveys, 137 used in the study to test the hypothesized model. The return data demonstrated that employees with higher learning levels worked at optimum performance levels when the leader

exhibited higher empowerment traits, and employees with lower learning levels demonstrated higher performance when the leader used less empowerment. These results confirm the theory by Iqbal et al. (2015) that leaders need to adapt to their situation as well as Jing and Avery's (2016) assertions that leadership links to effectiveness and performance.

High-performance work systems (HPWS) or systems used in human resource management are designed to increase performance, competencies, and motivation and has associated with decreasing turnover rates (Liao, Toya, Lepak, & Hong, 2009). Before Iqbal et al. (2015) and Jing and Avery (2016), Liao et al. found that practices can be different based on the employee or the groups to which they belong. For example, Liao et al. cite that those core employees benefit more from commitment-oriented work systems than those designated as non-core employees. This practice has also been identified with investment work systems as well. However, non-manufacturing settings were where most differences occurred. This practice further questions whether employees that are in-between groups generate variability in their experiences. To answer this question, Liao et al. noted that there might be differences between employee HPWS and management HPWS. The employee view seems to be a driver of performance outcomes because of lived experience and contextual perceptions, where the management view focuses on groups.

An essential process to small business success is hiring and maintaining a workforce that provides an optimal output (Way, 2002), and the workforce seen to have a significant influence on sustainability and competitive advantage. Providing past research that supports Liao et al.



(2009); Chang (2016); Jing and Avery (2016) and Way, cited that employees who demonstrate superior output are because of individual, organizational practices, and cultures that are not easy to duplicate. Because of market place complexities and firm strategy, small businesses that have access to an elite workforce transfer output as a competitive advantage. Way further stated that a significant barrier to small business success is the retention of a competent workforce. Studies by Chang, Jing, and Avery, and Way demonstrated that organizations with 100 or more employees that have experienced turnover had reported a negative relationship between HPWS and turnover. These results further show that the elements within HPWS that include staffing, compensation, flexible assignments, teamwork, training, and communication are critical in performance and retention practices.

Conclusions

The review of the literature has identified several topics that support the analysis of leadership behaviors and their influence on task performance and turnover intentions. Studies that provided the most significance for this study include Wells and Peachey (2011), Motowidlo et al. (1997), and Kim et al. (2017), which served as the frameworks that guided the research. Authors such as Iqbal et al. (2015), focused directly on leadership styles and performance, Dunne et al. (2016) focused on leadership influence on small business innovation, and Humphrey (2012) spoke to organizational identification, which may be a mediating factor in performance and turnover intention. For this study, identifying core and seminal works provided both a foundation and focus. Specifically, seminal works assisted in identifying background



observations that demonstrated where the research was from a historical perspective and also provided insights that led to the discovery of more recent works. The core literature presented the most critical information for the shape of this study. These works were more specific to the variables under investigation, as well as demonstrating where previous research was lacking.

The decision to focus on small manufacturing businesses and, more specifically, the central United States perspective, was made after determining that previous research neglected the influence leadership behaviors have on small business entities. The reviewed literature contained research of both qualitative and quantitative design. The decision to conduct a quantitative study was made based on the comments of Smith (2012), citing, the quantitative method is appropriate for studies where hypotheses are tested by measuring hard data with an objective intent.

Iqbal et al. (2015) noted that leadership coupled with HRM practices is emerging as a modern approach to employee management, which requires management and leadership to develop ways to be active and to utilize techniques that improve performance. According to Lee et al. (2016), employee empowerment is one tool that leaders can use to develop employee initiative and job satisfaction. However, research suggests that unregulated empowerment can lead to adverse outcomes because of overconfidence and strategic errors. Despite the negative aspects of empowerment, Seibert et al. (2004) stated that roots in the motivational study, job design, decision-making, and self-management demonstrate a positive relationship between empowerment and positive outcomes.



Li et al. (2017) cited that some turnover may be due in part to the quality of life, long hours, weekend work, and holidays. The organization that adds to performance and turnover issues may have introduced adjacent elements such as physical demands, seasonal fluctuations, and outside commitments. While attrition in a small business may not be as prevalent, but still a measurable inefficiency, absenteeism, downward trends in productivity, and low morale can predict turnover intentions. The literature describes the inefficiencies inherent to traditional forms of leadership and management practices (Iqbal et al., 2015; Jing & Avery, 2016; Lee et al., 2016), which can be an integration of different leadership styles that are needed as they can improve performance. Enhancing and nurturing leadership-performance relationships (Jing & Avery, 2016) may prove to be necessary and significant to maintain innovation, competencies, and competitive advantage within the dynamic environment going forward.

A study by Crede, Jong, and Harms (2019) investigated transformational leadership and task performance to examine if cultural values and practices moderate the relationship. Full range theory cites transformational leadership as the most effective of leadership forms.

Research shows that positive and even weak relationships between transformational leadership and performance suggest that increasing levels of transformational leadership may result in increases in performance (Crede et al., 2019). The findings demonstrate a significantly strong relationship between transformational leadership and performance in relation to items of organizational citizenship behavior. Findings also suggested that when introducing a commonmethod research design, transformational leadership only showed a modest influence on

performance. The secondary conclusion proved to be more accurate as the literature indicates that transformational leadership is less effective in Europe and North America and most effective in developing countries (Crede et al., 2019).

Similarly, Kammerhoff, Lauenstein, and Schutz (2019) cited that numerous studies have highlighted the positive contribution that transformational leadership has had on the well-being of organizations as well as performance. The presence of good leadership is essential to obtain optimal performance and satisfaction (Kammerhoff et al., 2019). In pursuit of an optimal leadership style, research has explored transformational, transactional, and laissez-faire leadership for over 40 years. Throughout this research, findings suggest that transformational leadership is the most effective style as it has proven effective across a variety of fields. Additionally, it has demonstrated positive effects on performance and satisfaction amongst teams and individuals (Kammerhoff et al., 2019). Transformational leadership describes a combination of idealized attributes, idealized behaviors, inspirational motivation, individual consideration, and intellectual stimulation. Much as the names state, these are ideal, and the reality depends on how many elements of transformational leadership are used and the extent they are used.

Focusing on the overlap of leadership constructs (i.e., authentic leadership and transformational), Ribeiro, Duarte, Filipe, and Torres de Oliveira (2020) found enhancements to employee attitudes and behaviors, which ultimately showed increases in performance. Despite the unique values of authentic leadership, the commonalities of both demonstrate increases in trust and commitment, as well as allowing employees to grow. However, Ribeiro et al. found

that organizational attachment and increased creativity to be a potential consequence of overly transparent work climates. Analyzing the common themes between authentic leadership and transformational leadership, the study by Ribeiro et al. found that creating a positive climate and building trust promoted increased commitment, and as it relates to small businesses, increased creativity. This analysis means that when employees are comfortable in their environment, they are more likely to be concerned with the organization's success and, in turn, reciprocate the behaviors of their leader.

Summary

Chapter 1 was an introduction to the lack of literature regarding the influence leadership behaviors have on performance and turnover intentions within the small manufacturing business arena. The objective of this study was to analyze and report on the leadership behaviors that exist in local small manufacturing firms and the extent to which they are associated with task performance and turnover intentions. Primary theories include leadership behaviors. Critical themes found within the literature demonstrate that leadership styles and behaviors do not vary in how influence occurs for performance and turnover. The same factors affect performance and turnover, but the degree of influence is relative to leadership effort and subordinate perception. While much of the literature provided a wealth of information related to the variables under investigation from a broad perspective, relevant literature about manufacturing was limited. It was necessary to isolate core theories and leverage for direction on how to further understand the business problem. For continuity, it was essential to develop an understanding of how theories

related to the topic guide in determining how the relationships exist within various organizational structures as well as how to shape the research design. Finally, many of the authors of prior studies seemingly chose either a descriptive design defined as an in-depth understanding of the population or a correlational design defined as identifying associations between variables.

This study effort combined two designs by seeking to identify the associations between the variables of task performance and turnover intentions as related to leadership behaviors. The effort addresses a deeper understanding of how the population perceives leadership behaviors with regards to their behaviors and tendencies. This research applied a quantitative research method through survey instruments to identify a correlation between leadership behaviors, task performance, and turnover intentions. A quantitative methodology was most appropriate for this study as the hypotheses were tested by measuring hard data with an objective intent (Smith, 2012).



CHAPTER 3. METHODOLOGY

Introduction

This chapter provides information related to research design, population and sampling, research setting, data collection, instrumentation, hypotheses, data analysis, validity and reliability, and ethical considerations for the study. The purpose of this study was to identify whether there is a relationship between leadership behaviors, task performance, and turnover intentions. Understanding the relationships between leader behaviors, task performance, and turnover intentions in small manufacturing firms allows management to make effective decisions while leading organizations. To further enhance research on small business and leadership behaviors, this study compared the relationships against those found by Kim et al., (2017) and those found by Wells and Peachey (2011).

Design and Methodology

This study is a correlational descriptive design as it was built upon prior descriptive research (Jing & Avery, 2016; Mishra et al., 2015) and sought to understand the relationship between leadership behaviors and their influence on task performance and turnover intentions. Data was collected using an online questionnaire that measured subordinate perceptions of their leader, their performance, and intention to quit. In addition to these variables, the sample population grouped into descriptive categories that included demographics and type of industry, as shown in Table 3. This study used linear regression was for testing the hypotheses concerning the relationship between variables. The independent variable focused on subordinate perceptions



of leadership behaviors and traits. The dependent variables focused on the subordinate's perceptions of task performance and assessment of turnover intention.

Table 3. Census Data for Study Location

Location	Population	High School	College	Shipments	Firms
Nebraska	1,929,268	90.9	30.6	57,499,177	164,089
Kansas	2,911,505	90.5	32.3	86,076,260	239,118
Oklahoma	3,943,452	87.5	28.2	74,295,394	491,606
Missouri	6,126,452	89.2	24.8	111,535,362	327,229
Totals	14,910,304	89.5	29.0	329,406,193	1,222,042
US Total	327,167,434	87.3	30.9	5,696,729,632	27,626,360
% of US	5%			5.7%	4.4%

Note. Adapted from U.S. Census Bureau. (2018). Census.gov. Retrieved from https://data.census.gov/cedsci/table?q=United%20States&g=0100000US&tid=ACSDP1Y2018.D P05

Population and Sampling

The organizations under investigation were small manufacturing firms located in the central United States. According to the Small Business Administration (2017), the size standard for small businesses is stated in the number of employees the number of receipts, and that the definition may vary by industry. Based on these parameters, a small business could have 1,500 employees and maintain status based on the number of receipts. For this study, the small business designation was approached as per the number of employees, as manufacturing may entail specialty products that are global and acquiring a high number of receipts.

In 2018, the U.S. Census Bureau (USCB) reported the population of the focused areas as 14 million or 5% of the U.S. total population. The USCB cited that 89.5% are high school graduates, and 29% are college graduates. The areas of focus have more than \$3.29 million in



manufacturing shipments, and while not broken out to specific industries, there are greater than 1 million firms in total and make-up 4% of the total U.S. small businesses.

To provide variety in the demographics, the participants provided information related to business longevity, business model, and core competencies and capabilities, according to Cooper and Schindler's (2014) assertions regarding composition variety (shown in Table 4). The goal of identifying longevity is to learn if there are increases in leadership awareness through years of experience. For example, if a leader exhibited certain leadership behaviors forty years ago, have they evolved with the changing workforce? Similarly, do business models influence leadership dynamics? Finally, how do competencies and capabilities influence leadership behaviors? For example, if two firms are specializing in plastics injection molding, are there variances in leadership behaviors, and to what extent does it affect employee performance?

Considering the data compiled from Small Business Administration (2017) and USCB (2018), the conclusion is that manufacturing small businesses in focused areas of the central United States provide an adequate population for this study as boundaries and growth is increasing. Table 4 identifies how many years the organizations have been in operation as well as the business model represented within the manufacturing industry. This table also demonstrates any anomalies that exist between industry segments and determine if there are any differences in leadership behaviors based on the longevity of the organization. The line of thinking is that older companies may not be aware of more recent leadership constructs and perhaps still operate under that premise. At the same time, new organizations will be keenly



aware of modern leadership constructs and possibly more sensitive to what drives their organization as it relates to employee behaviors.

Table 4. Matrix of Manufacturing Variance and Longevity

Years in Bus	siness					
	Business	0-5	6-10	11-15	16-20	21+
Model						
	Plastics		1		3	4
	Aerospace					3
	Metals				3	5
	General	6	6	2	3	55
Totals		6	7	2	7	67

Note: n = 89

Considering that this study used online services for questionnaire distribution, the population is indeterminable. The sample population was chosen by Qualtrics based on the criteria that the multi-format questionnaire was to be distributed online, to a minimum of 89 participants, and that there are 56 Likert type questions plus five demographic questions. The study required participants to fit three criteria: (a) an employee, (b) employed for 90 days or more, and (c) willing to spend 30 minutes or less on the questionnaire. Based on G*Power 3.1, the appropriate sample size identified what was needed by choosing f-tests, multiple linear regression: fixed model and R squared deviation from zero. The inputs were .15 effect size, 0.05 alpha, .95 power, and one predictor. An output of 89 total participants was adequate, and also satisfied by the 100 participants offered by Qualtrics.com, the supporting company for managing data collection.



Setting

Qualtrics, a supporting organization for research data collection, managed participants as data gathering occurred within the Qualtrics tool. Qualtrics provided a link for communicating the questionnaire with the participants. This process effort further assisted in participants' anonymity as neither a list of participants or contact information was necessary. This study required 89 participants based on G*power analysis. The contract with Qualtrics requested the instrument delivered via email to 89 participants that consented to take part in the research.

Data Collection

Data collection is the process of systematically acquiring and measuring information related to variables of interest to answer research questions, hypotheses testing, and outcome evaluation. The U.S. Department of Health and Human Services (2018) gave advice for ensuring research integrity through accurate data collection. They explained that the quality of data influenced the choice of relevant instruments, which can reduce the occurrence of common errors. Maintaining integrity can be ensured by focusing on pre-collection activities or quality assurance and post-collection activities. According to HHS (2018), the consequences of improper data collection include

- inaccurate answers to research questions
- nonreplicable study results
- distorted findings cause wasted resources
- misleading future research results, and
- potential ethical concerns.



Creswell (2014) cited six steps for the analysis of research data that include (a) reporting the number of complete and incomplete surveys, (b) determining response bias, (c) describing the plan for descriptive analysis for dependent and independent variables, (d) determining the necessity for reverse scoring on relevant instruments, (e) identifying the statistics and statistical programs used for inferential testing, and (f) illustrating the results in tables and figures for ease of interpretation. Accomplishing these objectives required an export of data to Microsoft Excel 365 Mac version for further analysis. Chapter 4 presents results, specifically, the number of complete and incomplete questionnaires, descriptive analysis of the variables, as well as statistical testing and illustration tables. Methods to determine bias and necessity for reverse scoring are part of the instrumentation and not considered relevant to this study. The instruments used were rigorously tested and proven to provide data as intended.

The first process in data collection for this study was to develop the instrument. Qualtrics, a supporting organization for research data collection, managed participants as data gathering occurred within the Qualtrics tool. Qualtrics provided a link for communicating the questionnaire with the participants. This process further assisted in participant's anonymity as neither a list of participants or contact information was necessary. This study only required 89 participants based on G*power. The contract with Qualtrics requested the instrument delivered via email to 89 participants that consented to take part in research services. If a participant's response was found inadequate, the specific questionnaire was disqualified and replaced with a questionnaire to a new participant. Of the participants who received questionnaires, they

completed the questionnaires as desired. No questionnaire feedback disqualified for data analysis.

The questionnaire for the study was directly related to the variables under examination. It was contrived through existing instrumentation to ensure that they fit the research question and to provide an accurate account of the related hypotheses. To minimize time and costs to the researcher, Qualtrics was provided the necessary link to the informed consent, instructions, and questionnaire needed for deploying the study. The instructions were that respondents completed the informed consent and acknowledged that responses be accurate and complete. By clicking Accept, the questionnaire was accessible. Identities were protected by not using names, numbers, or email addressed and by limiting the number of demographical questions. Properly allocating the data and protecting participants were done based on file labels and means of storage. Since the demographical questions were broad in scope, the data was labeled by the State of employment as identifiable data will not exist. The informed consent form notified participants of the right to choose participation in the study. The informed consent form further notified participants of the right to refuse to answer any question and the right to withdraw participation from the study at any time without repercussion. However, if participants chose not to answer all questions, the questionnaire data were excluded from the study. No information was excluded during the data collection, and all participants willfully acknowledged agreement with the study parameters. In summary, the data were collected via the Qualtrics database and then exported to a Microsoft Excel 365 Mac version file for analysis.



Instrumentation

This study examined three constructs under the guidelines outlined in the informed consent. The constructs consist of leadership behaviors, employee task performance, and turnover intentions. These constructs were measured using existing surveys that included (a) Bothma and Roodt's (2004) Turnover Intention Scale (TIS-6), (b) Avolio and Bass's (2000) Multifactor Leadership Questionnaire (MLQ), and (c) Murdoch's (2002) adaptation of Wiedower's (2001) Task Performance Scale. This data provided information that was analyzed to determine the extent to which leadership behaviors influence employee performance and turnover intention. Three sections further divide the remainder of the instrument section and present an explanation of the instruments.

Section 1: Leadership Behaviors

The Multifactor Leadership Questionnaire (MLQ) consisted of 45 statements related to leadership traits and their influence on followers from a leadership perspective. The tool provides measurements for passive, transactional, and transformational leadership types (Avolio & Bass, 2000). Through the identification of leader characteristics, the instrument assists individuals in learning about themselves through personal perceptions and those of their followers. Similar to the Transformational Leadership Survey (Clark, 2011), the MLQ is designed for personal development but is also suitable for research purposes. Mind Garden provided permission for the researcher to use this questionnaire in the study and requested that only the sample questions provided be included in the dissertation.



Section 2: Employee Performance

The Task Performance Scale was used for subordinates to self-assess as adapted from Wiedower's dissertation research as concluded in 2001, which included five items with a 5-point scale ranging from *unsatisfactory* to *excellent*. Wiedower's scale asked questions related to quality and quantity such as, number of activities completed, or a result produced, neatness, accuracy, dependability, and volume of work produced. Additional questions related to interpersonal traits include need to request supervisory assistance or requiring supervisory intervention, and the degree to which you promote feelings of self-esteem, goodwill, and cooperativeness among co-workers and leaders (Wiedower, 2001).

Section 3: Turnover Intention

The Turnover Intention Scale (TIS-6) was used as adapted by Roodt (2004) and was used based on proven reliability and validity. The TIS-6 scale consists of six items to measure an employee's desire to maintain employment or leave the company. The TIS-6 scale includes items such as assessing how often a participant considers leaving their job and assessing satisfaction and frustration. Concerning reliability, Bothma and Roodt (2004) demonstrate the reliability of the scale with (a=.80). To support this validity measurement, Nunnally and Bernstein (1994) suggest that a=.70 as the low threshold for internal consistency and reliability.

Hypotheses

The research questions and associated hypotheses for this study are as follows:

RQ1: To what extent does transformational leadership influence turnover intention?



H₁₀: Transformational leadership is not significantly related to turnover intention.

H_{1a}: Transformational leadership is significantly related to turnover intention.

RQ2: To what extent does transactional leadership influence turnover intention?

H2₀: Transformational leadership is not significantly related to turnover intention.

H2_a: Transformational leadership is significantly related to turnover intention.

RQ3: To what extent does passive-avoidant leadership influence turnover intention?

H₃₀: Passive-avoidant leadership is not significantly related to turnover intention.

H₃: Passive-avoidant leadership is significantly related to turnover intention.

RQ4: To what extent does transformational leadership influence employee performance?

H4₀: Transformational leadership is not significantly related to employee performance.

H_a: Transformational leadership is significantly related to employee performance.

RQ5: To what extent does transactional leadership influence employee performance?

H5₀: Transactional leadership is not significantly related to employee performance.

H5_a: Transactional leadership is significantly related to employee performance.

RQ6: To what extent does passive-avoidant leadership influence employee performance?

H6₀: Passive-avoidant leadership is not significantly related to employee performance.

H6_a: Passive-avoidant leadership is significantly related to employee performance.

While testing these hypotheses, it was essential to understand how each independent variable related to the dependent variable. Meaning, are task performance, and turnover intention perceived by subordinates as influenced by leadership behaviors, or are these variables



relative to low propensities and leadership behaviors have no influence? After the analysis of the variables, the associations were identified, thus validating the expectation that the dependent variable is contingent on employee perception. Therefore, it was crucial to test the hypotheses in subsets that group similar leadership traits as well as subordinate demographics to realize the extent of leadership influence fully.

Data Analysis

According to Martin and Bridgmon (2012), the analysis of data consists of many steps. An associated figure provides a representation of the process offered in 2012 by Martin and Bridgmon (see Appendix A). This research used analysis techniques similar to those used by Martin and Bridgmon (2012). This study consisted of two measurements, the influence that leadership behaviors have on turnover intentions from a small business, manufacturing, subordinate employee perspective.

The following procedures facilitated analysis for all three measurements of this study that include demographic correlations and the associations between core variables. XLStat (Addinsoft) was used to conduct multiple linear regression in accordance with procedures prescribed by Cohen et al. (2002).

Next, a multivariate analysis determined if there were scores viewed as unusual. As previously mentioned, the Pearson product-moment correlational coefficient validated whether the multiple regression analysis demonstrated a viable solution, as suggested by Martin and Bridgmon (2012). This coefficient measures linear relationships between two variables and



returns 1 for positive correlation, 0 for no correlation, and -1 for the negative correlation. This study determined associations between performance, turnover intentions, and leadership behaviors. The assessment of multicollinearity and singularity provided support on whether the data was free of redundancy. Also noted is that singularity is typically a predictor of data entry errors. An assessment of normality on scores was necessary for those that were not reflective of the predictive variable.

Validity and Reliability

The evidence-based practice consists of the implementation of findings from well-conducted research, and the results must regard with significant considerations as well as the rigor or the study's enhancement. In quantitative research, measuring validity and reliability achieves these considerations (Heale & Twycross, 2015). The validity, as defined by Heale and Twycross (2015), is the extent to which a concept is accurately measured. Instruments with prior validation for measurement are regarded for measuring the intended. Reliability relates to the consistency of the instrument, meaning; it consistently produces the same results within similar contexts.

This study used three instruments to measure whether leadership behaviors influence employee task performance and turnover intentions. The first instrument is the Multifactor Leadership Questionnaire 5x-Short (MLQ) by Avolio and Bass (2000). Developed in 1990, it has seen several iterations to measure transformational, transactional, and passive leadership styles. The original instrument consisted of a 142-item questionnaire, and after testing, was reduced to

73-items (Tepper & Percy, 1994). Previous research shows reliabilities for the six-leadership factor scale ranged from .63 to .92 and are consistent with earlier results. Internal consistency exceeded .70 for all models except management-by-exception. Intercorrelations were high and significant for both transformational and transactional with .81 and .69, respectively (Avolio et al., 2000). For this study, the MLQ short form was used and consisted of 45 statements. This version asks respondents to assess their leader by answering statements related to critical thinking, influence, motivation, stimulation, and consideration.

The second instrument is the Task Performance Scale by Murdoch (2002), as adapted from Wiedower's (2001) study into the relationship of management communication and contingent reinforcement of the corporate vision with job performance. This scale has five items with a 5-item Likert scale that measures from 1-5 where 1 = unsatisfactory and 5 = excellent. By adding up the responses, the total score occurs. The reliability of this instrument occurred at .72, according to a study conducted by Sultan and Tareen (2014). This instrument maintained its documented validity for this study as it posed questions directly related to the research question that identifies task timeliness, quality of work, the quantity of work, need for supervision, and interpersonal relationships.

The third instrument is the Turnover Intention Scale (TIS-6) by Bothma and Roodt (2004). This scale was designed to measure turnover intention and consists of six questions that relate to personal perceptions of needs, satisfaction, compensation, and goals. This scale consisted of four questions that range from 1 = never to 5 = always, one question that ranges



from $1 = very \ satisfying$ to 5 = dissatisfying, and one question that ranges from 1 = highly unlikely to $5 = highly \ likely$. Validity and reliability testing showed that the TIS-6 scale was able to measure turnover intentions with 0.80 reliability accurately. This scale distinguishes between those employees who leave and those employees who stay with a company. Furthermore, the scale established statistical significance by differentiating actual turnover and remaining variables providing differential validity.

Ethical Considerations

Cooper and Schindler (2014) placed the ethical treatment of participants in the forefront by highlighting the importance of explaining the study benefits, participant rights, and protections, and obtaining informed consent. In addition to participant protection, Cooper and Schindler (2014) stated that the research team's safety is essential as well as ensuring that there are no adverse post-study effects on either the participants, researcher, or sponsors. To facilitate the execution of an ethical study, all activities pre, during, and post-study were per regulations as set forth by Capella University's Institutional Review Board (IRB).

The guidelines, as provided by Cooper and Schindler (2014), served as the basis for participants' right to privacy and observed throughout the study. This right allowed all prospective participants the right not to divulge any personal information, including the right not to participate at all. This right was also provided in the informed consent and stated that the participant could cease cooperation at any time without penalty. Furthermore, per informed consent standards of practice, full disclosure of the study was provided before the study



commenced. If any of the participants were willing to proceed, they were required to press the agree button before the study would begin. Dissimilar to other studies, documentation was not presented for dissemination to serve as a debriefing exercise, nor an opportunity for any question's participants may have anticipated. This step was necessary based on a level of protection (anonymity) afforded to the participants. However, the researcher's contact info was on the informed consent form, if the participant felt compelled to contact the researcher.

Ethical research is necessary, according to Cooper and Schindler (2014), to protect participants, sponsors, and researchers alike. Excellent care orchestrated to eliminate all traces of personal identifiers, as related to participants and sponsors occurred. As mentioned in the data collection section, anonymity secured through measures, such as only using numbers for coding and destroying the numbers after distribution, also occurred. Besides, no participant's name, number, or email address was requested.

The distribution process occurred with the questionnaire link deployed via Qualtrics' network. This method allowed the participants access without having to log in. Since the study was via a web-based survey, Qualtrics and Mind Garden organizations were acceptable under Capella's IRB regulations. The site that housed the questionnaire does not provide personal information on users. Confidentiality also included deleting all data from the Qualtrics database and using pseudonyms throughout the dissertation. Data is only stored on the encrypted, password-protected, thumb drive leaving no trace on the internet. The data will store in a home secured safe for seven years following IRB storing and destroying protocol. Destruction of the



study's data will occur by pulverizing and burning the encrypted thumb drive as noted by the U.S. Department of Education (2014), as an appropriate means of data destruction.



CHAPTER 4. RESULTS

Introduction

This chapter presents the findings from data collection and the methodologies cited in the previous chapter. The chapter begins with a brief overview and discussion related to the purpose, research questions, methodology, data collection process, and a summary of population and sampling. This fourth chapter highlights results from collecting and examining data. A report on data analyses, confirmed from stated hypotheses, presented further clarity on the intent of the quantitative study.

Overview

The objective of this study was to understand the influence that leadership behavior has on turnover intentions and task performance. Previous research by authors such as Iqbal, Anwar, and Haider (2015) and Dunne, Aaron, McDowell, Urban, and Geho (2016) demonstrated the importance that behaviors exhibited by leaders have on organizational successes. Research conducted by Gottfredson and Aguinis (2016) determined the degree to which performance is enhanced across various types of behaviors, specifically, why do positive behaviors improve performance? Ofobruku and Yusuf (2016) found that performance was contingent on capabilities, intelligence, and tacit organizational knowledge and enhanced by knowledge sharing and transfer. According to Wells and Peachey (2011), these same variables can also be a determinate in turnover intention, citing that trust, leader attitudes, and satisfaction are factors for retaining employees who have the skills and knowledge to increase organizational performance.



The participants of this study were employees in the manufacturing industry in Kansas, Missouri, Oklahoma, and Nebraska located within the central United States. Questionnaires were administered and completed by non-management employees from various types of manufacturing disciplines. The sample size consisted of 89 manufacturing employees. Of the 89 participants who completed the questionnaire, there were 89 data results qualified for analysis.

Data Collection Results

The power analysis for this research required 89 questionnaires be sent to participants and 89 questionnaires were received. Qualtrics was able to achieve all data collection on the first attempt. The Qualtrics experience was positive. The support team was knowledgeable in their platform as well as the dissertation process. Importing separate questionnaires into one homogeneous questionnaire was simple and participant selection was efficient because of the Qualtrics method for engagement and quality control. A key aspect that was found to be most advantageous is that if a participant was deemed ineligible, the participant was simply replaced. This was also true for any participant that may decide to withdraw from the study. As previously mentioned, Qualtrics was able to get the required number of participants without any withdraws or disqualifications. Additionally, Qualtrics was able to retrieve all the data on the first attempt. After analyzing the data for any abnormalities and to ensure all questions were complete, it was determined that all data received was as intended and useful for the study. The raw data was received from Qualtrics as an excel file that was easily uploaded to SPSS for further analysis.

The study's instrumentation included the MLQ (Avolio & Bass, 2000), TIS-6 (Roodt, 2004), and TPS (Wiedower, 2001). The TIS-6 is the fourth version and is a Likert-type scale ranging from 1 = never to 5 = very satisfying, highly unlikely, or always, depending on thequestion. The TPS is an open-source instrument that takes into consideration timelines, quality of work, the quantity of work, need for supervision, and interpersonal impact. This instrument is a Likert-type scale and ranges from 1 = unsatisfactory, 3 = satisfactory," and 5 = excellent. The TIS-6 and TPS instruments do not require reverse scoring and an added and divided by the number of responses. The MLQ contains 46 questions segmented into four subcategories. The subcategories include transformational, transactional, passive-avoidant, and outcomes of leadership. Transformational leadership has five subscales with four items each, while transactional leadership has two subscales with four items, and passive-avoidant has two subscales with four items. Per Avolio and Bass, outcomes of leadership are not leadership styles, but rather results of leadership behavior. Outcomes of leadership have three subscales. These subscales include extra effort, effectiveness, and satisfaction. Extra effort subscale has three items, the effectiveness subscale has four items, and the satisfaction subscale has two items. The three instruments were combined into one online questionnaire that was made available to participants by Qualtrics.

Descriptive Analysis

Demographic data was included in the questionnaire and accessed after accepting the informed consent. The demographic questions included age, gender, which state they worked in,



how long they have worked in the position, how long has their company been in business, and their role or job title. The length of participant employment and the role/job title assisted in determining minimum entrance criteria. Data analysis included 89 participants (n=89).

Table 5 presents the demographics of the participants and their respective organizations and industries. A fairly equal representation of men and women were participants, and the age brackets were unremarkable. Most remarkable were categories for years of operations (21+ was highest), which may show that small businesses can and do sustain over longer periods of time. The highest industry frequency was general manufacturing. This showed that my participants were working in more types of manufacturing than what research had identified while searching for top areas of manufacturing in the states represented.



Table 5. Participant Demographics

Demographics		N	
Gender/Sex			
	Male	40	
	Female	49	
Age Range			
	18-25	6	
	26-35	33	
	36-45	24	
	46-55	17	
	56+	9	
Work State			
	Kansas	19	
	Missouri	41	
	Oklahoma	21	
	Nebraska	8	
Industry			
•	Plastics	8	
	Aerospace	3	
	Metal Work	7	
	General	71	
Years in Operation			
- r - · · ·	0-5	6	
	6-10	7	
	11-15	2	
	16-20	7	
	21+	67	

Note. This table represents the demographics for the study participants.

Analysis of Hypotheses

Hypothesis 1

H₁₀. Transformational leadership is not significantly related to turnover intention.

H₁_a. Transformational leadership is significantly related to turnover intention.

Hypothesis 1 was tested using multiple linear regression. The relationship between transformational leadership and turnover intention was found to be statistically insignificant



(Appendix B-4; p-value = 0.394; α = 0.05). Thus, the null hypothesis, that transformational leadership is not significantly related to turnover intention, was retained. Further testing of critical assumptions and effect size was therefore abandoned.

Hypothesis 2

H2₀. Transactional leadership is not significantly related to turnover intention.

H2a. Transactional leadership is significantly related to turnover intention.

Hypothesis 2 was tested using multiple linear regression. The relationship between transactional leadership and turnover intention was found to be statistically significant (Appendix C-4; p=0.0001; $\alpha=0.05$). Thus, the null hypothesis was rejected and the alternate hypothesis (H2_a) that transactional leadership is significantly related to turnover intention was accepted. Note that despite the relationship being significant, the reported relationship found between transactional leadership and turnover intention (see Table C-5; $R^2=0.194$; Adj $R^2=0.175$), is considered weak, as per Gloeckner et al. (2001, p. 227). Normality of the data was tested using a Shapiro-Wilk test with the conclusion that the data is normally distributed (see Table C-8; p=0.076; $\alpha=0.05$). An examination of the standardized residuals concluded the data did not violate the linearity assumption (see Figure C-2).

Hypothesis 3

H₃₀. Passive-avoidant leadership is not significantly related to turnover intention.

H₃. Passive-avoidant leadership is significantly related to turnover intention.



Hypothesis 3 was tested using multiple linear regression. The relationship between passive-avoidant leadership and turnover intention was found to be statistically significant (Appendix D-5; p = 0.012; $\alpha = 0.05$). Thus, the null hypothesis was rejected and the alternate hypothesis that passive-avoidant leadership is significantly related to turnover intention was accepted. Note that a weak effect size relationship was found between transactional leadership and turnover intention (Table D-4; $R^2 = 0.098$; Adj $R^2 = 0.077$; Gloeckner et al., 2001, p. 227) despite the relationship being significant. An examination of the standardized residuals concluded the data did not violate the linearity assumption (Figure D-6).

Hypothesis 4

H4₀. Transformational leadership is not significantly related to employee performance.

H_a. Transformational leadership is significantly related to employee performance.

Hypothesis 4 was tested using multiple linear regression. The relationship between transformational leadership and turnover intention was found to be statistically significant (Appendix E-5; p = 0.007; $\alpha = 0.05$). Thus, the null hypothesis was rejected and the alternate hypothesis (H4_a) that passive-avoidant leadership is significantly related to turnover intention was accepted. Note that a weak effect size relationship was found between transactional leadership and turnover intention (Table E-4; $R^2 = 0.174$; Adj $R^2 = 0.124$; Gloeckner et al., 2001, p. 227) despite the relationship being significant. An examination of the standardized residuals concluded the data did not violate the linearity assumption (Figure E-8).



Hypothesis 5

H5₀. Transactional leadership is not significantly related to employee performance.

H5_a. Transactional leadership is significantly related to employee performance.

Hypothesis 5 was tested using multiple linear regression. The relationship between transactional leadership and turnover intention was found to be statistically insignificant (Appendix F; p = 0.187; $\alpha = 0.05$). Thus, the null hypothesis that transactional leadership is not significantly related to turnover intention was retained. Further testing of critical assumptions and effect size was therefore abandoned.

Hypothesis 6

H6₀. Passive-avoidant leadership is not significantly related to employee performance.

H_a. Passive-avoidant leadership is significantly related to employee performance.

Hypothesis 6 was tested using multiple linear regression. The relationship between passive-avoidant leadership and turnover intention was found to be statistically insignificant (Appendix G; p = 0.368; $\alpha = 0.05$). Thus, the null hypothesis that passive-avoidant leadership is not significantly related to turnover intention was retained. Further testing of critical assumptions and effect size was therefore abandoned.

Summary

The data attained from 89 employees within the central United States indicate working for a small business that specializes in manufactured goods. The employees were required to have been employed for 90 days or more and be 18 years of age or older. The participants



submitted responses to the 45 item MLQ questionnaire that focused on the transformational subscales (referred to as 5 I's), idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, and individual consideration. Additionally, the transactional subscales contingent reward and management by exception (active) as well as passive-avoidant subscales laissez-faire and management by exception (passive) were analyzed. The participants also responded to the five-item task performance scale, which asked the participants to assess their performance and the six-item turnover intention scale, which asked the participants to assess their intentions to leave their jobs.

Table 6 shows the summary of the hypotheses with their respective location within the appendix as well as associated p-value and results of testing. The null hypothesis was rejected in three out of six cases and retained in three of six cases for mixed results. However, the effect size analysis for the significant cases showed only weak relationships between the dependent and independent variables.

Table 6. Summary of Hypotheses

	Table	<i>p</i> -value	Null Hypothesis	\mathbb{R}^2
Hypothesis 1	В	0.394	Retained	0.060
Hypothesis 2	C	0.0001*	Rejected	0.194
Hypothesis 3	D	0.012*	Rejected	0.098
Hypothesis 4	E	0.007*	Rejected	0.174
Hypothesis 5	F	0.187	Retained	0.038
Hypothesis 6	G	0.368	Retained	0.023

Note. * =significant; alpha = 0.05. See also Figure 4.

CHAPTER 5. CONCLUSIONS

Introduction

This quantitative descriptive study sought to determine if there was any correlation between leadership behaviors and task performance and turnover intentions within the small business, manufacturing industry. This study set out to understand if any of the leadership styles measured by Avolio & Bass's 2000 Multifactor Leadership Questionnaire (MLQ) would impose on the organization and employee, as more beneficial to the organization. Additionally, to what extent were employee's performance and intent to quit their job influenced. Participants provided input that measured their levels of task performance using Wiedower's 2001 Task Performance Scale as well as Roodt's 2004 Turnover Intention Scale to measure their intent to leave the company. The remainder of this chapter evaluates the dimensions of the research questions and explore any themes identified in chapter 4. Following this analysis will be an evaluation of how the research fulfills the stated purpose, evaluation of the contribution to the business problem, recommendations for further research, and conclusion.

Evaluation of Research Questions and Hypotheses

This section provides summary and explanatory discussion of the results from the statistical analysis and the resulting findings regarding answering the research questions. Figure 4, provided after this summary, shows the final alignment with the theoretical framework of the study with the findings.

RQ 1. To what extent does transformational leadership influence turnover intention?



The findings regarding research question 1 were inconclusive. The research could not find evidence of a relationship between transformational leadership and turnover intention. This finding was not surprising as the assumption was that the elements of transformational leadership would influence turnover to a lesser degree than employee performance because transformational leadership is more related to relationship building and increasing motivation. Additionally, it was assumed that employees choose to stay or leave a job for reasons other than leadership behaviors. For example, an employee could have received an offer from another company, or perhaps a spouse is being relocated. Neither of these examples need to be caused by indifference with leadership or leadership perception, but simply natural progression of one's life. This question confirms findings in other research (Dvir et al., 2002; Humphrey, 2012) as transformational leadership enhanced morality, empowerment, and motivation, all of which could be conceived as increasing personal growth and performance.

Initially, the expectation was that transformational leadership would have some positive influence on turnover intention because of the observed increase in organizational citizenship behaviors (Humphrey, 2012). Humphrey's research also concluded that transformational leadership had a negative relationship with organizational identity. Considering that loyalty is contingent, in some aspects, on how an employee identifies with their organization, it is reasonable to conclude that the findings are correct and consistent with the literature. This finding presents implications for practice. The first implication is that transformational leadership, while having many positive qualities, will not limit an employee's intent to leave

since the need to leave can be influenced by circumstances that exist outside of the workplace. The next implication is that the elements of transformational leadership are better suited for increases in performance based on findings that significant outcomes included positive relationships with role modeling, trust building, and motivation (Humphrey, 2012).

RQ 2. To what extent does transactional leadership influence turnover intention?

This research found that a weak relationship exists between transactional leadership and turnover intentions. This finding is somewhat surprising in that prior research (Spahr, 2016) found that transactional leadership is better suited for large corporations or global projects. However, it was also found that transactional leadership is results oriented and entails short-term goals, rules, and efficiency. Despite this research being focused on small manufacturing firms, it can be concluded that the type of industry plays a larger role in leadership strategy than does organizational size. Taking into consideration the differences in study criteria between the small businesses of this study and the large organizations of the examined literature, this finding confirms prior research (Spahr, 2016; Tyssen et al., 2013). Most notably, transactional leadership is better suited when the organization is deadline driven and when there is minimal hierarchy.

The initial expectation was that transactional leadership would have a positive influence on turnover intention. While it was anticipated that the relationship would be more than weak, the findings of this study do align with findings in prior research (Breevaart et al., 2014; Spahr, 2016; Tyssen et al., 2013). The expectation assumed that employees would thrive in an



environment where the rules were stated and expectations for efficiency and quality clearly outlined. Another assumption was that working within this leadership dynamic would increase job skills that would in turn, generate organizational identity. Enhanced organizational identity coupled with limited hierarchy and increased performance would either result in workplace longevity or alternatively, result in the turnover of the elite employees to other organizations. Implications for practice are that components to transactional leadership (contingent reward and management by exception active) are viewed as having a positive relationship with turnover intentions. This means that if the transactional leadership construct is adopted, employees tend to respond well when they are motivated to achieve short-term goals that eventually satisfy the long-term goal.

RQ 3. To what extent does passive-avoidant leadership influence turnover intention?

This research found that a weak relationship exists between passive-avoidant leadership and turnover intentions. This finding is surprising from a macro view of business in that prior research describes passive-avoidant leadership as potentially destructive and entirely subjective as it relies on the acumen of each party to be successful (Azam et al., 2019). However, considering the nature of small business and the inherent skill sets possessed by employees, it is not as surprising that some would not be negatively influenced by a non-interactive leadership style. This question neither confirms or contradicts other research since there is a possible overlap of perception as to whether passive-avoidant leadership is effective and in which environments it is commonly used.



The expectation was that passive-avoidant leadership would have a positive relationship with turnover intention, demonstrating that the behavior increases the chance of an employee leaving. This is because characteristics of passive-avoidant leadership are contradictory to proven effective leadership behaviors that follow social exchange theory. The implication for practice is that for this leadership behavior to be effective, as opposed to other quid-pro-quo behaviors, the leader needs to understand the knowledge possessed by the employees and the dynamics of the workforce. If the employees are knowledgeable about their job, have a commitment to efficiency and quality, and feel loyalty to their organization, passive leadership may be effective.

RQ 4. To what extent does transformational leadership influence employee performance?

This research found that a weak relationship exists between transformational leadership and employee performance. This finding is not surprising since the characteristics of transformational leadership have proven effective in leading employees to meet organizational goals. Specific to this study, inspirational motivation and individual consideration had the highest influence on employee performance, so it can be assumed that leaders who take an active role in the leader/follower relationship will empower employees to work faster, with more accuracy and less supervision. Despite transformational leaderships ability to leverage employee abilities to fulfill long-term goals, Dvir et al. (2002) found that there is little evidence to support how long a leader can influence employee motives, desires, and values. Individual employee



traits aside, this question confirms prior research that transformational leadership can be an effective construct for leading employees when focused on increasing performance.

In terms of what was expected versus what was found in the literature, this finding means that transformational leaders may find success leading teams to reach long-term goals with supportive intentions and the ability to develop skills. It is also important that leaders understand that over time, what motivates an employee may change and it will be necessary to adapt in an effort to bring a new approach and mitigate any negative effects. The ability to adapt and create a fresh view and undertaking of organizational goals may be viewed as encouraging and bring with it a renewed focus within the individual and team. The implication for practice is to identify what the organizations needs are and understand the unique attributes of the employees in an effort to adopt the transformational characteristics that will be most conducive to success. Once successes are realized, the leader should be diligent in determining when changes are needed so that focus is renewed and maintained. This will provide employees with the tools to further develop and mitigate any transitions in mindset that would otherwise result in a decrease in performance and an increase in turnover.

RQ 5. To what extent does transactional leadership influence employee performance?

The findings regarding research question 5 were inconclusive. The research could not find evidence of a relationship between transactional leadership and employee performance.

This finding is somewhat surprising as the elements of transactional leadership were assumed to strategically fit for leading a manufacturing team within a small business arena. This lack of



evidence may be because of the small business aspect. Evidence was found to support RQ4, where transformational leadership has a weak, but positive relationship, suggesting that in a small business environment, employees may be more receptive to a more participative leadership dynamic rather than an instructional structure. This question confirms other research (Iqbal et al., 2015), specifically, the assumption that small business may require leadership abilities that differ from conventional norms. Iqbal et al. stated that effective leadership should be adaptive to current situations and determine the best way to support employees based on their needs, while also factoring the required levels of direction, empowerment, and decision-making.

The expectation was that transactional leadership would have a significant relationship with employee performance, which is similar to what was found in the literature. Despite the lack of evidence to support this relationship, practical implications would be to identify the employee needs against the organizational goals to determine whether employees are motivated to a higher degree by either participative leadership or a quid-pro-quo, instructional leadership construct.

RQ 6. To what extent does passive-avoidant leadership influence employee performance?

The findings regarding research Question 6 were inconclusive. The research could not find evidence of a relationship between passive-avoidant leadership and employee performance. This finding is not surprising as prior research by Iqbal et al. (2015) showed that this construct could be effective when there are time constraints for decisions, but participative or democratic



leadership would be more effective when complete alignment and motivation exist. As it relates to this study, the findings moderately confirm other research (Iqbal et al., 2015; Lee et al., 2016) since the effectiveness is stated to be relevant to the organizational dynamics and employee needs. Lee et al. (2016) found that minimal and excessive empowerment can lead to dysfunctional performance. This finding was further compounded by employee aptitude, where higher learning employees performed better with more motivation and lower learning employees performed better with less empowerment. This confirms that leaders need to adapt to situations as well as the link between leadership and performance (Jing & Avery, 2016). The literature regarding leadership and employee performance suggests that in the right environment, passive-avoidant leadership would be an effective model for increasing performance.

The expectation was that the relationship between passive-avoidant leadership and employee performance would not exist, but participative and democratic styles of leadership would be more prevalent and accepted in small manufacturing organizations. Based on the expectation versus what was found in the literature, the implication for practice is that leadership needs to understand their employee's propensity for learning and adapt accordingly. Leadership should consider the findings of Lee et al. (2016), where higher learners prefer more motivation and lower learners prefer less motivation.



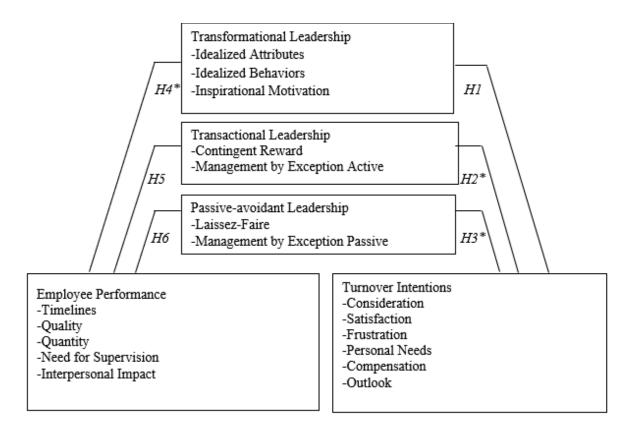


Figure 4. Theoretical framework showing the significant* hypotheses to answer the research questions.

Fulfillment of Research Purpose

The purpose of this research was to identify the extent to which leadership behaviors influence task performance and turnover intentions within small businesses in the manufacturing industry. The primary focus of the study was to identify these variables as they exist in the central United States. This research adds to the collective body of knowledge, in that those organizations that fit the outlined profile will be able to understand how leadership styles and behaviors influence productivity and retention from an employee perspective. After an



exhaustive review of the literature, this approach demonstrated that similar studies were from a managerial perspective.

Therefore, it is hopeful that this research will shed a new understanding of leader-follower dynamics and organizational success. The findings of this research demonstrated a significant relationship between transformational leadership and task performance, as well as transactional leadership, passive-avoidant leadership, and turnover intentions. Previous research (Azam, Khan, & Khan, 2019; Sithole & Sudha, 2014) found that the relationships exist, but identified that transformational and transactional leadership are most effective when used as a balanced effort.

Contribution to Business Problem

This research analyzed the influence leadership behaviors have on employee performance and turnover intentions within small manufacturing businesses. The goal of this research was to use quantitative research methods to determine and understand the extent that leadership behaviors influenced task performance and turnover intentions in small manufacturing businesses within the central United States. Additionally, this study set out to understand how these variables would assist in understanding the business problem, how do leadership behaviors influence task performance and turnover intentions within small businesses in the central United States? The research questions made clear that leadership behaviors have a significant influence on task performance and turnover intentions in small businesses, and the type of leadership behavior that exists may have a differing influence relative to the type of manufacturing and



organizational structure. This study also found that the significance of influence proved to be consistent with previous studies in that no one leadership behavior is better than another. However, it depends on factors such as how the behaviors are used, with what consistency the leader uses the behavior, and if the behavior matches how the employee perceives their job.

Recommendations for Further Research

It appears that this may be the first study that looks at leadership behaviors and influence on task performance and turnover intentions in the manufacturing small business arena, which provides several opportunities for future research. Future research should look into and expand on the limitations of this study as well as the following recommendations.

This study should be replicated as there were no studies found at the time that were similar in population and criteria. Replication of this study would add substantial data for the small business community and add to the overall knowledge base of leadership behavior. Future research should focus on the demographics of the research. For example, this study did not find any direct correlation between leadership behaviors and employee age, industry, or how long they have worked for the organization, all of which were expected to have some degree of correlation. Future research should replicate this study from a managerial perspective. Though there are numerous studies on leadership behaviors and task performance and turnover intentions, there were very few that highlighted findings from a small business perspective and none related to manufacturing in combination. Future research should broaden the scope of this study from four states in the central United States to perhaps a specific region or as a national



study. This research is admittedly small in scope, and while it does provide evidence for optimal leadership styles and behaviors, it may not represent the country as a whole. Future research should expand the research on leadership behaviors and turnover intention by analyzing data related to the outcomes of leadership in the MLQ, precisely extra effort, effectiveness, and satisfaction with the leadership.

Conclusions

The findings from this research are mostly consistent with prior research. Prior to data analysis, there were assumptions as to whether the outcomes would follow conventional wisdom or take an unforeseen path. The review of literature showed that the majority of similar research was presented from a managerial and large corporation perspective, where this research approached the variables from a small business and employee perspective. It was reasonable to assume that these differences could possibly distort the expected outcomes, however, understanding the nuances of the observed behaviors meant that it was also possible that the leadership constructs would be universally sound. An assessment of the hypotheses show that transactional and passive-avoidant leadership are significantly related to turnover intentions, while transformational leadership is significantly related to employee performance. It should be noted that all three significant relationships are weak and should be tested on a larger sample.

RQ1 found that the relationship between transformational leadership and turnover intentions to be statistically insignificant and the null hypothesis was retained. Further testing of the critical assumptions and effect size were abandoned. RQ2 found that the relationship



between transactional leadership and turnover intentions to be statistically significant and the alternate hypothesis was accepted. RQ3 found that the relationship between passive-avoidant leadership and turnover intention to be statistically significant and the alternate hypothesis was accepted. RQ4 found that the relationship between transformational leadership and employee performance to be statistically significant and the alternate hypothesis was accepted. RQ5 found that the relationship between transactional leadership and employee performance was statistically insignificant and the null hypothesis was retained. Further testing of the critical assumptions and effect size were abandoned. RQ6 found that the relationship between passive-avoidant leadership and employee performance was statistically insignificant and the null hypothesis was retained. Further testing of critical assumptions and effect size were abandoned. The contribution to knowledge is that after analyzing the data and comparing the findings to prior research, it appears that the most effective leadership construct is dependent on the needs of the employees. Additionally, leadership should take into consideration that participative and democratic leadership are both highly effective, relative to the employees learning abilities.

Based on the research, the practitioner benefit is that this is the first study to explore leadership behaviors from a small manufacturing perspective. More specifically, this study focused on increasing employee performance and decreasing turnover. Practitioners can use this research to understand the characteristics of leader behaviors for a multitude of purposes. The strength of this research is suited for understand the which behaviors are better suited for a specific culture or leader/follower dynamic or to enhance leader development.

REFERENCES

- Abdelgawad, S. G., Zahra, S. A., Svejenova, S., & Sapienza, H. J. (2013). Strategic leadership and entrepreneurial capability for game change. *Journal of Leadership & Organizational Studies*, 394-407. https://doi.org/10.1177/1548051813475484
- Afshari, L., & Gibson, P. (2016). How to increase organizational commitment through transactional leadership. *Leadership & Organization Development Journal*, *37*, 507-519. doi:10.1108/LODJ-08-2014-0148
- Andries, P., & Czarnitzki, D. (2014). Small firm innovation performance and employee involvement. *Small Business Economics*, 43(1), 21-38. doi:10.1007/s11187-014-9577-1
- Antonakis, J., & House, R. J. (2014). Instrumental leadership: Measurement and extension of transformational–transactional leadership theory. *The Leadership Quarterly*, *25*, 746–771. https://doi.org/10.1016/j.leaqua.2014.04.005
- Avolio, B. J., & Bass, B. M. (2000). *Multifactor leadership questionnaire (MLQ)*. Retrieved from https://www.statisticssolutions.com/
- Azam, O., Khan, H. G. A., Khan, A., & Khan, A. Z. (2019). Fragility impact of passive leadership on organizational citizenship behavior and turnover intentions: Mediating effect of organizational interpersonal trust. *Review of Economics and Development Studies*, *5*, 663-674. doi:10.26710/reads.v5i4.663
- Bharati, P., & Chaudhury, A. (2006). Current status of technology adoption: Micro, small and medium manufacturing firms in Boston. *Communications of the ACM, 49*, 88-93. Retrieved from http://scholarworks.umb.edu/
- Blanchard, K. H., Carlos, J. P., & Randolph, W. A. (1995). *The empowerment barometer and action plan*. Escondido, CA: Blanchard Training and Development.
- Bolden, R., Gosling, J., Marturano, A., & Dennison, P. (2003). *A review of leadership theory and competency frameworks*. *Center for Leadership Studies*. Retrieved from https://www.academia.edu/1004388/A_review_of_leadership_theory_and_competency_f rameworks
- Bothma, C. F., & Roodt, G. (2004). The validation of the turnover intention scale. *SA Journal of Human Resource Management*, 11(1). https://doi.org/10.4102/sajhrm.v11i1.507



- Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O. K., & Espevik, R. (2014). Daily transactional and transformational leadership and daily employee engagement. *Journal of Occupational & Organizational Psychology*, 87(1), 138-157. doi:10.1111/joop.12041
- Carroll, B., Levy, L., & Richmond, D. (2008). Leadership as practice: Challenging the competency paradigm. *Leadership*, *4*, 363–379. https://doi.org/10. 1177/1742715008095186
- Chang, Y. (2016). High-performance work systems, joint impact of transformational leadership, an empowerment climate and organizational ambidexterity. *Journal of Organizational Change Management*, 29(3), 424-444. https://doi.org/10.1108/jocm-09-2015-0150
- Chinomona, R. (2013). Business owner's expertise, employee skills training and business performance: A small business perspective. *Journal of Applied Business Research*, 29, 1883-1896. https://doi.org/10.19030/jabr.v29i6.8224
- Clark, D. R. (2011). *Transformational leadership survey*. Retrieved from http://nwlink.com/~donclark/leader/transformational survey.html
- Cohen, J., Cohen, P., West, S. G., Aiken, L. S. (2002). Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences. Taylor & Francis Group.
- Cooper, D., & Schindler, P. S. (2014). *Business research methods* (12th ed.). Retrieved from https://www.vitalsource.com/
- Crawford, J. A., Dawkins, S., Martin, A., & Lewis, G. (2020). Putting the leader back into authentic leadership: Reconceptualizing and rethinking leaders. *Australian Journal of Management*, 45(1), 114–133. https://doi.org/10.1177/0312896219836460
- Crede, M., Jong, J., & Harms, P. (2019). The generalizability of transformational leadership across cultures: A meta-analysis. Retrieved from https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1083&context=psychology_pubs
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Thousand Oaks, CA: Sage.
- Dedahanov, A. T., Lee, D. H., Rhee, J., & Yoon, J. (2016). Entrepreneur's paternalistic leadership style and creativity: The mediating role of employee voice. *Management Decision*, *54*, 2310-2324. http://dx.doi.org/10.1108/MD-11-2015-0537



- Dunne, T. C., Aaron, J. R., McDowell, W. C., Urban, D. J., & Geho, P. R. (2016). The impact of leadership on small business innovativeness. *Journal of Business Research*, 69, 4876–4881. https://doi.org/10.1016/j.jbusres.2016.04.046
- Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, 45, 735-744. doi:10.2307/3069307
- Farahnak, L. R., Ehrhart, M. G., Torres, E. M., & Aarons, G. A. (2020). The influence of transformational leadership and leader attitudes on subordinate attitudes and implementation success. *Journal of Leadership & Organizational Studies*, *27*(1), 98–111. https://doi.org/10.1177/1548051818824529
- Gale, W., & Brown, S. (2013). Small business, innovation, and tax policy: A review. *National Tax Journal*, 66, 871-892. doi:10.17310/ntj.2013.4.05
- Germain, M. (2012). Traits and skills theories as the nexus between leadership and expertise: Reality or fallacy? *Performance Improvement*, *51*, 32-39. doi:10.1002/pfi.21265
- Gloeckner, G. W., Gliner, J. A., Tochterman, S. M., & Morgan, G. A. (2001). Assessing validity and reliability for data collection instruments. In E. I. Farmer & J. W. Rojewski (Eds.), Research Pathways: Writing Professional Papers, Theses, and Dissertations in Workforce Education (pp. 223-245). Lanham, MD: University Press of America.
- Gonzalez-Mulé, E., Courtright, S. H., DeGeest, D., Seong, J.-Y., & Hong, D.-S. (2014). Channeled autonomy. *Journal of Management*, *42*, 2018–2033. https://doi.org/10.1177/0149206314535443
- Gottfredson, R. K., & Aguinis, H. (2016). Leadership behaviors and follower performance: Deductive and inductive examination of theoretical rationales and underlying mechanisms. *Journal of Organizational Behavior 38*, 558-591. doi:10.1002/job.2152
- Guo, W., Dai, R., & Yang, J. (2016). The effect of leadership task behavior and relational behavior on job performance: Investigating the moderating role of work alienation. *Journal of Service Science and Management*, 09(02), 97-110. doi:10.4236/jssm.2016.92013
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence Based Nursing*, 18, 66-67. Retrieved from http://ebn.bmj.com/content/18/3/66.abstract



- Houkes, I., Janssen, P., de Jonge, J., & Bakker, A. B. (1999). Personality, work characteristics, and employee well-being: a longitudinal analysis of additive and moderating effects. *Journal of Occupational Health Psychology 8*(1), 20-38. doi:10.1037/1076-8998.8.1.20
- House, R. J., & Mitchell, T. R. (1974). Path-goal theory of leadership. *Journal of Contemporary Business* 3, 81–97. Retrieved from http://www.leadershipforattorneys.org/
- Humphrey, A. (2012). Transformational leadership and organizational citizenship behaviors: The role of organizational identification. *The Psychologist-Manager Journal*, *15*, 247-268. doi:10.1080/10887156.2012.731831
- Iqbal, N., Anwar, S., & Haider, N. (2015). Effect of leadership style on employee performance. Arabian Journal of Business and Management Review, 5. doi:10.4172/2223-5833.1000146
- Jing, F. F., & Avery, G. C. (2016). Missing links in understanding the relationship between leadership and organizational performance. *International Business & Economics Research Journal (IBER)*, 15, 107. doi:10.19030/iber.v15i3.9675
- Junaidu, A., Abdul, M., Mohamed, Z., & Sambasivan, M. (2012). Tangible resources and export performance of SMEs in the Nigerian leather industry: The moderating role of firm size. *International Journal of Academic Research in Economics and Management Sciences, 1*, 235-247. Retrieved from https://www.academia.edu/5669025
- Kalsoom, Z., Khan, M. A., & Zubair, S. S. (2018). Impact of transactional leadership and transformational leadership on employee performance: A case of FMCG industry of Pakistan. *Industrial Engineering Letters*, 8, 23-30. Retrieved from https://www.academia.edu/36961123
- Kammerhoff, J., Lauenstein, O., & Schutz, A. (2019). Leading toward harmony-Different types of conflict mediate how followers' perceptions of transformational leadership are related to job satisfaction and performance. *European Management Journal*, *37*(2), 210-221. https://doi.org/10.1016/j.emj.2018.06.003
- Katou, A. A. (2015). Transformational leadership and organisational performance. *Employee Relations*, *37*, 329-353. doi:10.1108/ER-05-2014-0056
- Kehoe, R. R., Lepak, D. P., & Bentley, F. S. (2018). Let's call a star a star: Task performance, external status, and exceptional contributors in organizations. *Journal of Management 44*, 1848-1872. https://doi.org/10.1177/0149206316628644



- Kempster, S., & Gregory, S. H. (2017). 'Should I stay or should I go?' Exploring leadership-as-practice in the middle management role. *Leadership*, *13*, 496–515. https://doi.org/10.1177/1742715015611205
- Kim, S., Tam, L., Kim, J., & Rhee, Y. (2017), Determinants of employee turnover intention: Understanding the roles of organizational justice, supervisory justice, authoritarian organizational culture and organization-employee relationship quality, *Corporate Communications: An International Journal*, 22, 308-328. https://doi.org/10.1108/CCIJ-11-2016-0074
- Lan, Y., & Chen, Z. (2020). Transformational leadership, career adaptability, and work behaviors: The moderating role of task variety. Frontiers in Psychology. Retrieved from https://www.frontiersin.org/article/10.3389/fpsyg.2019.02922
- Lavine, M. (2014). Paradoxical leadership and the competing values framework. *Journal of Applied Behavioral Science*, 50, 189-205. doi:10.1177/0021886314522510
- Lawter, L., Kopelman, R. E., & Prottas, D. J. (2015). McGregor's theory X/Y and job performance: A multilevel, multi-source analysis. *Journal of Managerial Issues*, *27*(1-4), 84-101. Retrieved from https://digitalcommons.sacredheart.edu/
- Leadership Central. (2016). *Leadership theories*. Retrieved from https://www.leadership-central.com/leadership-theories.html
- Lee, S., Cheong, M., Kim, M., & Yun, S. (2016). Never too much? The curvilinear relationship between empowering leadership and task performance. *Group & Organization Management*, 42(1), 11–38. https://doi.org/10.1177/1059601116646474
- Leitch, C. M., & Volery, T. (2017). Entrepreneurial leadership: Insights and directions. International Small Business Journal, 35, 147–156. https://doi.org/10.1177/0266242616681397
- Li, J., Kim, W. G., & Zhao, X. (2017). Multilevel model of management support and casino employee turnover intention. *Tourism Management*, *59*, 193-204. doi:10.1016/j.tourman.2016.08.006
- Liao, H., Toya, K., Lepak, D., & Hong, Y. (2009). Do they see eye to eye? Management and employee perspectives of high-performance work systems and influence processes on service quality. *The Journal of Applied Psychology*. 94. 371-91. doi:10.1037/a0013504



- Lorenzo-Seva, U., & Ferrando, P. J. (2018). A general approach for fitting pure exploratory bifactor models. *Multivariate Behavioral Research*, *54*(1), 15-30. https://doi.org/10.1080/00273171.2018.1484339
- Makris, R. Z. (2017). *Staff turnover rates in small business on the rise*. Retrieved from https://insidesmallbusiness.com.au/
- Marcella, R., & Illingworth, L. (2012). The impact of information behaviour on small business failure. *Information Research*, 17(3), Paper 525. Retrieved from http://www.informationr.net/ir/
- Martin, W. E., & Bridgmon, K. D. (2012). Bivariate and multivariate correlational methods using multiple regression analysis. In *Quantitative and statistical research methods* (pp. 401-407). San Francisco, CA: John Wiley & Sons, Inc.
- Mayhew, R. (2018). *Employee turnover definitions & calculations*. Retrieved from https://smallbusiness.chron.com/employee-turnover-definitions-calculations-11611.html
- Maynard, M. T., Gilson, L. L., & Mathieu, J. E. (2012). Empowerment—Fad or fab? A multilevel review of the past two decades of research. *Journal of Management*, *38*, 1231–1281. https://doi.org/10.1177/0149206312438773
- Mekraz, A., & Raghava, R. G. (2016). Leadership style and retail store performance A case study of discount retail chain. *Journal of Business and Retail Management Research*, 10, 1-10. Retrieved from http://www.jbrmr.com/
- Miller, A. (2014). Redefining operational excellence: New strategies for maximizing performance and profits across the organization. [Google Book version]. Retrieved from https://tinyurl.com/y33dt8ju
- Mishra, A. K., Mishra, K. E., & Grubb, W. L. (2015). Reducing turnover in franchise-based business organizations: The role of trust, justice and commitment. *Small Business Institute Journal 11(1)*, 6-23. Retrieved from https://www.sbij.org/
- Mishra, S. K., & Kumar, K. K. (2016). Minimizing the cost of emotional dissonance at work: A multi-sample analysis. *Management Decision*, *54*, 778-795. doi:10.1108/MD-06-2015-0222



- Motowidlo, S. J., Borman, W. C., & Schmit, M. J. (1997) A theory of individual differences in task and contextual performance. *Human Performance*, *10*, 71-83. doi:10.1207/s15327043hup1002 1
- Murray, M. (2016). *Small business guide to manufacturing*. Retrieved from https://www.thebalance.com/
- Nunnally, J., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill
- Ofobruku, S. A., & Yusuf, B. M. (2016). Effect of knowledge transfer on employees' performance in selected small business in Asaba, Nigeria. *Arabian Journal of Business and Management Review (Oman Chapter)*, 6, 1.
- Pedraja-Rejas, L., Rodríguez-Ponce, E., & Rodríguez-Ponce, J. (2006). Leadership styles and effectiveness: a study of small firms in Chile. *Interciencia*, *31*, 500-504. Retrieved from http://www.redalyc.org/
- Pongpearchan, P. (2016). Effect of transformational leadership and high performance work systems on job motivation and task performance: Empirical evidence from business schools of Thailand universities. *Journal of Business and Retail Management Research*, 10. Retrieved from https://jbrmr.com/
- Randolph, W. A. (1995). Navigating the journey to empowerment. *Organizational Dynamics*, 23, 19-32. doi:10.1016/0090-2616(95)90014-4
- Ribeiro, N., Duarte, A. P., Filipe, R., & Torres de Oliveira, R. (2020). How authentic leadership promotes individual creativity: The mediating role of affective commitment. *Journal of Leadership & Organizational Studies*, *27*(2), 189–202. https://doi.org/10.1177/1548051819842796
- Ryan, J. C., & Tipu, S. A. A. (2013). Leadership effects on innovation propensity: A two-factor full range leadership model. *Journal of Business Research*, 66, 2116–2129. https://doi.org/10.1016/j.jbusres.2013.02.038
- Sahu, S., Pathardikar, A., & Kumar, A. (2017). Transformational leadership and turnover: Mediating effects of employee engagement, employer branding, and psychological attachment, *Leadership & Organization Development Journal*, https://doi.org/10.1108/LODJ-12-2014-0243



- Sandhaland, H., Oltedal, H. A., Hystad, S. W., & Eid, J. (2017). Effects of leadership style and psychological job demands on situation awareness and the willingness to take a risk: A survey of selected offshore vessels. *Safety Science*, *93*, 178-186. doi: 10.1016/j.ssci.2016.12.004
- Schuh, S. C., Zhang, X., & Tian, P. (2013). For the good or the bad? Interactive effects of transformational leadership with moral and authoritarian leadership behaviors. *Journal of Business Ethics*, *116*, 629-640. doi:10.1007/s10551-012-1486-0
- Seibert, S. E., Silver, S. R., & Randolph, W. A. (2004). Taking empowerment to the next level: A multiple-level model of empowerment, performance, and satisfaction. *The Academy of Management Journal*, 47, 332-349. doi:10.2307/20159585
- Shu, C. (2015). The impact of intrinsic motivation on the effectiveness of leadership style toward on work engagement. *Contemporary Management Research*, 11, 327-350. doi:10.7903/cmr.14043
- Shukla, P. K., & Shukla, M. P. (2014). Small business survival index traction and movement in rankings of states (2000-2013). *Journal of Business & Economics Research*, 12, 153-158. Retrieved from http://www.cluteinstitute.com/
- Sithole, A., & Sudha, S. (2014). Transactional leadership style and employees' turnover intention in information technology organizations. *International Journal of Case Studies*, 4. Retrieved from https://ssrn.com/abstract=2875957
- Small Business Administration. (2015). 2015 small business profiles for the states and territories. Retrieved from https://www.sba.gov/sites/default/files/advocacy/SB%20Profiles%202014-15_0.pdf
- Small Business Administration. (2017). 2017 small business profiles for the states and territories. Retrieved from https://www.sba.gov/advocacy/2017-small-business-profiles-states-and-territories
- Small Business Administration. (2019). 2019 small business profiles for the states and territories. Retrieved from https://advocacy.sba.gov/2019/04/24/2019-small-business-profiles-for-the-states-and-territories/



- Smith, M. T. (2012). Introduction to quantitative research methods: Research methodology and scientific writing. Swedish Royal Institute of Technology. Retrieved from https://kth.instructure.com/files/40172/download?download_frd=1&verifier=Xn97mRQ WWxZiyjBNn08GqFsP5TaZhClJ49nJOvdo
- Solomon, G. T., Bryant, A., May, K., & Perry, V. (2013). Survival of the fittest: Technical assistance, survival and growth of small businesses and implications for public policy. *Technovation*, *33*, 292-301. doi:10.1016/j.technovation.2013.06.002
- Spahr, P. (2016). What is transactional leadership? How structure leads to results. *St. Thomas University Online*. Retrieved from https://online.stu.edu/transactional-leadership/
- Subramony, M., & Holtom, B. C. (2012). The long-term influence of service employee attrition on customer outcomes and profits. *Journal of Service Research*, *15*, 460–473. https://doi.org/10.1177/1094670512452792
- Sultan, S., & Tareen, N. (2014). Examining the effect of self-efficacy on employees' performance through cultural intelligence. *Journal of Asian Dev. Studies*, 3. Retrieved from http://globalcentre.org/
- Tepper, B. J., & Percy, P. M. (1994). Structural validity of the multifactor leadership questionnaire. *Educational and Psychological Measurement*, *54*, 734-744. https://doi.org/10.1177/0012164494054003020
- Tyssen, A. K., Wald, A., & Heidenreich, S. (2013). Leadership in the context of temporary organizations. *Journal of Leadership & Organizational Studies*, *21*, 376–393. https://doi.org/10.1177/1548051813502086
- University of Southern California (USC.edu). (2017). *Quantitative methods Organizing your social sciences research paper* research guides at University of Southern California. http://libguides.usc.edu/
- U.S. Bureau of Labor Statistics. (2019). *Table 16. Annual total separations rates by industry and region, not seasonally adjusted.* Retrieved from https://www.bls.gov/news.release/jolts.t16.htm
- U.S. Census Bureau. (2018). Census.gov. Retrieved from https://data.census.gov/cedsci/table?q=United%20States&g=0100000US&tid=ACSDP1 Y2018.DP05



- U.S. Department of Education. (2014). *Best practices for data destruction*. Retrieved from https://files.eric.ed.gov/fulltext/ED585293.pdf
- U.S. Department of Health and Human Services. (2018). Data collection. Retrieved from https://ori.hhs.gov/education/products/n_illinois_u/datamanagement/dctopic.html#:~:text =Data%20Collection,test%20hypotheses%2C%20and%20evaluate%20outcomes.
- Waldman, D. A., Carter, M. Z., & Hom, P. W. (2012). A multilevel investigation of leadership and turnover behavior. *Journal of Management*, 41, 1724-1744. doi:10.1177/0149206312460679
- Wargo, W. (2015). *Identifying assumptions and limitations for your dissertation*. Menifee, CA: Academic Information Center. Retrieved from http://www.academicinfocenter. com/
- Way, S. A. (2002). High performance work systems and intermediate indicators of firm performance within the US small business sector. *Journal of Management*, 28, 765-785. doi:10.1177/014920630202800604
- Wells, J. E., & Peachey, J. W. (2011). Turnover intentions: Do leadership behaviors and satisfaction with the leader matter? *Team Performance Management*, 17. https://doi.org/10.1108/13527591111114693
- Wiedower, K. A. (2001). A shared vision: The relationship of management communication and contingent reinforcement of the corporate vision with job performance, organizational commitment, and intent to leave. UMI: 3030139, p. 134.



APPENDIX A. STEPS IN STATISTICAL ANALYSIS

Step #	Steps
Step 1	State the omnibus research question
Step 2	Establish alternative hypotheses
Step 3	Establish the null hypotheses
Step 4	Decide power analysis
Step 5	Choose statistic and distribution
Step 6	Determine probability
Step 7	Study data diagnostics
Step 8	Determine outliers
Step 9	Screen correlation coefficients
Step 10	Assess multicollinearity and singularity
Step 11	Assess normality, linearity, and homoscedasticity
Step 12	Analyze multiple regression

Note. Steps for conducting statistical analysis as prescribed by Martin and Bridgmon (2012).



APPENDIX B. LINEAR REGRESSION TRANSFORMATIONAL LEADERSHIP AND

TURNOVER INTENTION

Table B-1. Summary Statistics:

Variable	Observations	Obs. with missing data	Obs. without missing data	Minimum	Maximum	Mean	Std. deviation
TIS	89	0	89	1.833	4.333	2.989	0.557
IA	89	0	89	1.000	5.000	3.194	1.095
IB	89	0	89	1.000	5.000	3.039	0.994
IM	89	0	89	1.000	5.000	3.278	1.034
IS	89	0	89	1.000	5.000	3.087	0.990
IC	89	0	89	1.000	5.000	3.025	1.041

Note. Summary statistics for turnover intentions and elements of transformational leadership.

Table B-2. *Correlation Matrix*

	IA	IB	IM	IS	IC	TIS
IA	1	0.788	0.822	0.720	0.856	-0.208
IB	0.788	1	0.755	0.723	0.743	-0.152
IM	0.822	0.755	1	0.712	0.738	-0.221
IS	0.720	0.723	0.712	1	0.735	-0.137
IC	0.856	0.743	0.738	0.735	1	-0.209
TIS	-0.208	-0.152	-0.221	-0.137	-0.209	1

Note. Correlation matrix for turnover intention and elements of transformational leadership.

Table B-3. Multicollinearity Statistics

	IA	IB	IM	IS	IC
Tolerance	0.175	0.309	0.280	0.368	0.235
VIF	5.713	3.233	3.573	2.714	4.258

Note. Multicollinearity statistics for turnover intention and elements of transformational leadership.



Table B-4. Analysis of Variance (TIS)

Source	DF	Sum of squares	Mean squares	F	Pr > F
Model	5	1.623	0.325	1.051	0.394
Error	83	25.643	0.309		
Corrected Total	88	27.267			

Note. Computed against model Y=Mean(Y)

Table B-5. Goodness of Fit Statistics (TIS)

Observations Sum of	89
weights	89
DF	83
\mathbb{R}^2	0.060
Adjusted R ²	0.003
MSE	0.309
RMSE	0.556
MAPE	14.666
DW	1.793
Ср	6.000
AIC	-98.748
SBC	-83.816
PC	1.076

Note. Goodness of fit for turnover intentions and elements of transformational leadership.

Table B-6. Model Parameters (TIS)

Source	Value	Standard error	t	Pr > t	Lower bound (95%)	Upper bound (95%)
Intercept	3.362	0.213	15.776	< 0.0001	2.938	3.786
IA	-0.021	0.129	-0.164	0.871	-0.278	0.236
IB	0.042	0.107	0.395	0.694	-0.171	0.256
IM	-0.106	0.108	-0.976	0.332	-0.321	0.110
IS	0.050	0.099	0.504	0.616	-0.146	0.246
IC	-0.080	0.117	-0.679	0.499	-0.313	0.154

Note. Model parameters for turnover intentions and elements of transformational leadership.

Table B-7. Standardized Coefficients (TIS)

Source	Value	Standard error	t	Pr > t	Lower bound (95%)	Upper bound (95%)
IA	-0.042	0.254	-0.164	0.871	-0.548	0.464
IB	0.076	0.191	0.395	0.694	-0.305	0.456
IM	-0.196	0.201	-0.976	0.332	-0.597	0.204
IS	0.088	0.175	0.504	0.616	-0.260	0.437
IC	-0.149	0.220	-0.679	0.499	-0.586	0.288

Note. Standardized coefficients for turnover intentions and elements of transformational leadership.

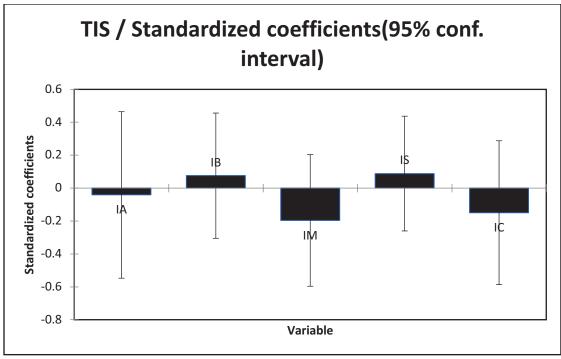


Figure B-1. Standardized coefficients for turnover intentions and elements of transformational leadership.

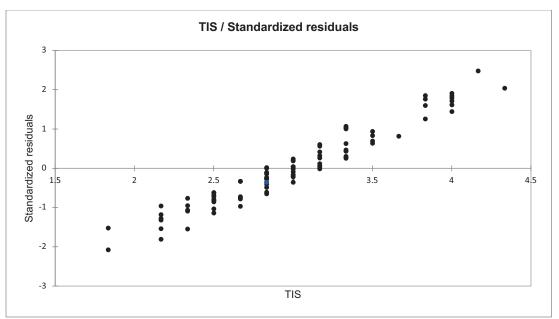


Figure B-2. Standardized residuals for turnover intentions and elements of transformational leadership.

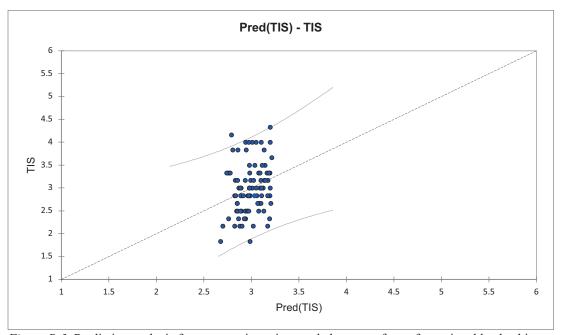


Figure B-3. Predictive analysis for turnover intentions and elements of transformational leadership.



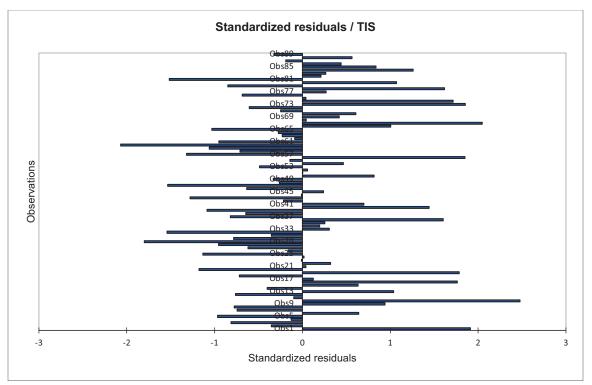


Figure B-4. Standardized residuals and observations for turnover intentions and transformational leadership.



APPENDIX C. LINEAR REGRESSION TRANSACTIONAL LEADERSHIP AND

TURNOVER INTENTION

Table C-1. Summary Statistics

Variable	Observations	Obs. with missing data	Obs. without missing data	Minimum	Maximum	Mean	Std. deviation
TIS	89	0	89	1.833	4.333	2.989	0.557
CR	89	0	89	1.000	5.000	3.258	1.056
MBEA	89	0	89	1.000	5.000	3.166	0.838

Note. Summary statistics for turnover intentions and transactional leadership.

Table C-2. Correlation Matrix

	CR	MBEA	TIS
CR	1	0.177	-0.238
MBEA	0.177	1	0.322
TIS	-0.238	0.322	1

Note. Correlation matrix for turnover intentions and transactional leadership.

Table C-3. Multicollinearity Statistics

	CR	MBEA
Tolerance	0.969	0.969
VIF	1.032	1.032

Note. Multicollinearity statistics for turnover intentions and transactional leadership.



Table C-4. Goodness of Fit Statistics (TIS)

Observations	89
Sum of weights	89
DF	86
\mathbb{R}^2	0.194
Adjusted R ²	0.175
MSE	0.256
RMSE	0.506
MAPE	13.099
DW	1.928
Ср	3.000
AIC	-118.435
SBC	-110.969
PC	0.863

Note. Goodness of fit for turnover intentions and transactional leadership.

Table C-5. Analysis of Variance (TIS)

Source	DF	Sum of squares		Mean squares	F	Pr > F
Model		2	5.279	2.639	10.323	<0.0001
Error		86	21.988	0.256		
Corrected Total		88	27.267			

Note. Computed against model Y=Mean(Y)

Table C-6. Model Parameters (TIS)

Source	Value	Standard error	t	Pr > t	Lower bound (95%)	Upper bound (95%)
Intercept	2.722	0.249	10.939	< 0.0001	2.227	3.217
CR	-0.161	0.052	-3.098	0.003	-0.264	-0.058
MBEA	0.250	0.065	3.819	0.000	0.120	0.380

Note. Model parameters for turnover intentions and transactional leadership.



Table C-7. Standardized Coefficients (TIS)

Source	Value	Standard error	t	Pr > t	Lower bound (95%)	Upper bound (95%)
CR	-0.305	0.098	-3.098	0.003	-0.500	-0.109
MBEA	0.376	0.098	3.819	0.000	0.180	0.571

Note. Standardized coefficients for turnover intentions and transactional leadership.

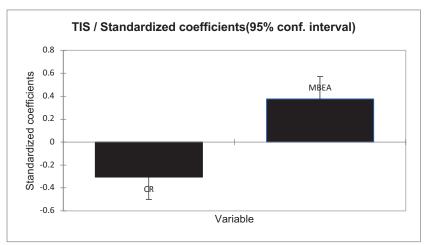


Figure C-1. Standardized coefficients for turnover intentions and transactional leadership.

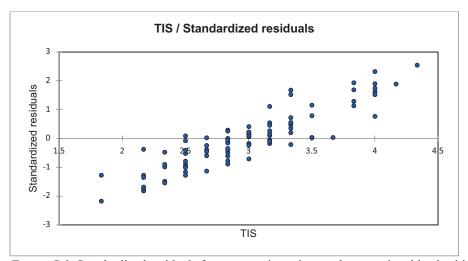


Figure C-2. Standardized residuals for turnover intentions and transactional leadership.

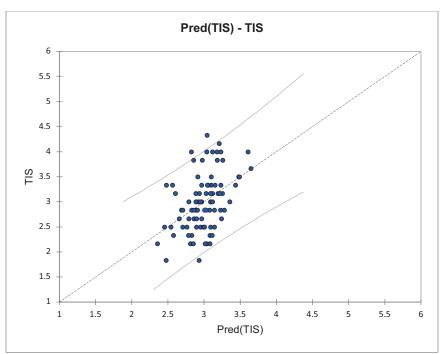


Figure C-3. Predictive analysis for turnover intentions and transactional leadership.

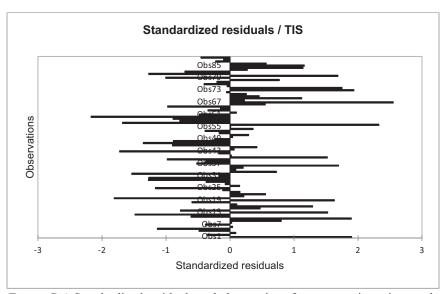


Figure C-4. Standardized residuals and observations for turnover intentions and transactional leadership.

APPENDIX D. LINEAR REGRESSION PASSIVE-AVOIDANT LEADERSHIP AND

TURNOVER INTENTION

Table D-1. Summary Statistics

Variable	Observations	Obs. with missing data	Obs. without missing data	Minimum	Maximum	Mean	Std. deviation
TIS	89	0	89	1.833	4.333	2.989	0.557
MBEP	89	0	89	1.000	5.000	2.890	0.925
LF	89	0	89	1.000	5.000	2.486	1.028

Note. Summary statistics for turnover intentions and passive-avoidant leadership.

Table D-2. Correlation Matrix

	MBEP	LF	TIS
MBEP	1	0.704	0.295
LF	0.704	1	0.280
TIS	0.295	0.280	1

Note. Correlation matrix for turnover intentions and passive-avoidant leadership.

Table D-3. Multicollinearity Statistics

	MBEP	LF
Tolerance	0.504	0.504
VIF	1.983	1.983

Note. Multicollinearity statistics for turnover intentions and passive-avoidant leadership.



Table D-4. Analysis of Variance (TIS)

Source	DF	Sum of squares	Mean squares	F	Pr > F
Model	2	2.662	1.331	4.652	0.012
Error	86	24.604	0.286		
Corrected					
Total	88	27.267			

Note. Computed against model Y=Mean(Y)

Table D-5. Goodness of Fit Statistics (TIS)

Observations	89
Sum of weights	89
DF	86
\mathbb{R}^2	0.098
Adjusted R ²	0.077
MSE	0.286
RMSE	0.535
MAPE	14.422
DW	1.850
Ср	3.000
AIC	-108.428
SBC	-100.962
PC	0.965

Note. Goodness of fit statistics for turnover intentions and passive-avoidant leadership.



Table D-6. Model Parameters (TIS)

Source	Value	Standard error	t	Pr > t	Lower bound (95%)	Upper bound (95%)
Intercept	2.458	0.188	13.092	< 0.0001	2.084	2.831
MBEP	0.117	0.087	1.347	0.181	-0.056	0.289
LF	0.078	0.078	0.995	0.323	-0.078	0.233

Note. Model parameters for turnover intentions and passive-avoidant leadership.

Table D-7. Standardized Coefficients (TIS)

Source	Value	Standard error	t	Pr > t	Lower bound (95%)	Upper bound (95%)
MBEP	0.194	0.144	1.347	0.181	-0.092	0.481
LF	0.144	0.144	0.995	0.323	-0.143	0.430

Note. Standardized coefficients for turnover intentions and passive-avoidant leadership.

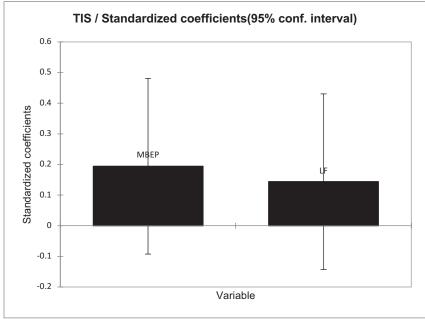


Figure D-1. Standardized coefficients for turnover intentions and elements of passive-avoidant leadership.

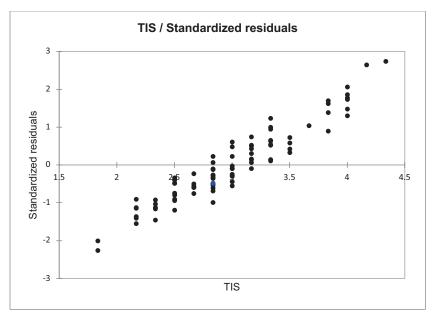


Figure D-2. Standardized residuals for turnover intentions and elements of passive-avoidant leadership.

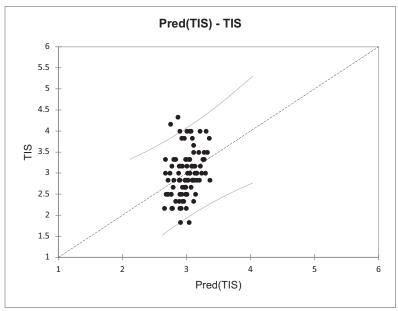


Figure D-3. Predictive analysis for turnover intention and passive-avoidant leadership.

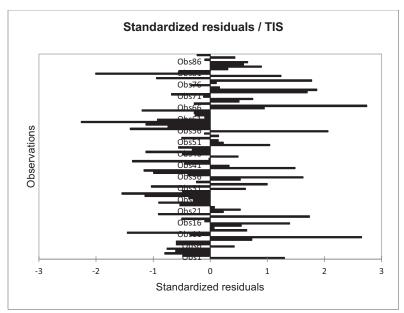


Figure D-4. Standardized residuals and observations for turnover intentions and passive-avoidant leadership.



APPENDIX E. LINEAR REGRESSION TRANSFORMATIONAL LEADERSHIP AND EMPLOYEE PERFORMANCE

Table E-1. Summary Statistics

Variable	Observations	Obs. with missing data	Obs. without missing data	Minimum	Maximum	Mean	Std. deviation
TPS	89	0	89	2.000	5.000	3.984	0.596
IA	89	0	89	1.000	5.000	3.194	1.095
IB	89	0	89	1.000	5.000	3.039	0.994
IM	89	0	89	1.000	5.000	3.278	1.034
IS	89	0	89	1.000	5.000	3.087	0.990
IC	89	0	89	1.000	5.000	3.025	1.041

Note. Summary statistics for employee performance and transformational leadership.

Table E-2. Correlation Matrix

	IA	IB	IM	IS	IC	TPS
IA	1	0.788	0.822	0.720	0.856	0.159
IB	0.788	1	0.755	0.723	0.743	0.135
IM	0.822	0.755	1	0.712	0.738	0.182
IS	0.720	0.723	0.712	1	0.735	0.121
IC	0.856	0.743	0.738	0.735	1	0.320
TPS	0.159	0.135	0.182	0.121	0.320	1

Note. Correlation matrix for employee performance and transformational leadership.

Table E-3. Multicollinearity Statistics

	IA	IB	IM	IS	IC
Tolerance	0.175	0.309	0.280	0.368	0.235
VIF	5.713	3.233	3.573	2.714	4.258

Note. Multicollinearity statistics for employee performance and transformational leadership.



Table E-4. Analysis of Variance

Source	DF	Sum of squares	Mean squares	F	Pr > F
Model	5	5.424	1.085	3.491	0.007
Error	83	25.794	0.311		
Corrected					
Total	88	31.218			

Note. Computed against model Y=Mean(Y)

Table E-5. Goodness of Fit Statistics (TPS)

Observations	89
Sum of weights	89
DF	83
\mathbb{R}^2	0.174
Adjusted R ²	0.124
MSE	0.311
RMSE	0.557
MAPE	11.636
DW	1.989
Ср	6.000
AIC	-98.227
SBC	-83.295
PC	0.946

Note. Goodness of fit statistics for employee performance and transformational leadership.



Table E-6. Model Parameters (TPS)

Source	Value	Standard error	t	Pr > t	Lower bound (95%)	Upper bound (95%)
Intercept	3.594	0.214	16.816	< 0.0001	3.169	4.019
IA	-0.240	0.130	-1.853	0.067	-0.498	0.018
IB	-0.049	0.108	-0.457	0.649	-0.263	0.165
IM	0.100	0.109	0.925	0.358	-0.116	0.317
IS	-0.116	0.099	-1.178	0.242	-0.313	0.080
IC	0.442	0.118	3.752	0.000	0.208	0.676

Note. Model parameters for employee performance and transformational leadership.

Table E-7. Standardized Coefficients (TPS)

Source	Value	Standard error	t	Pr > t	Lower bound (95%)	Upper bound (95%)
IA	-0.442	0.238	-1.853	0.067	-0.916	0.032
IB	-0.082	0.179	-0.457	0.649	-0.439	0.275
IM	0.174	0.189	0.925	0.358	-0.201	0.549
IS	-0.194	0.164	-1.178	0.242	-0.521	0.133
IC	0.772	0.206	3.752	0.000	0.363	1.182

Note. Standardized coefficients for employee performance and transformational leadership.

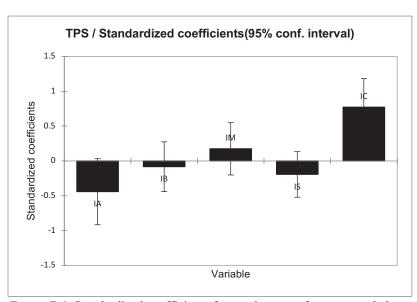


Figure E-1. Standardized coefficients for employee performance and elements of transformational leadership.

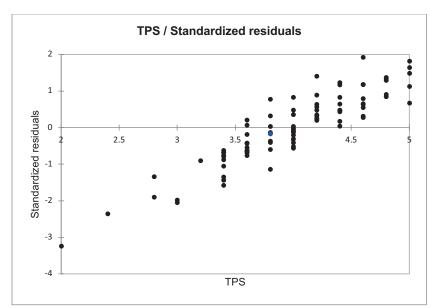


Figure E-2. Standardized residuals for employee performance and elements of transformational leadership.

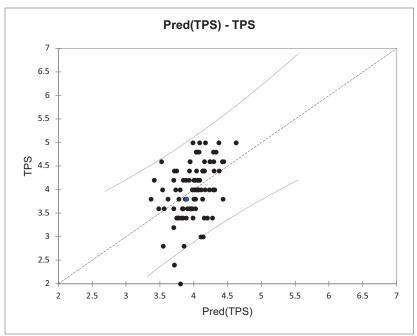


Figure E-3. Predictive analysis for employee performance and elements of transformational leadership.

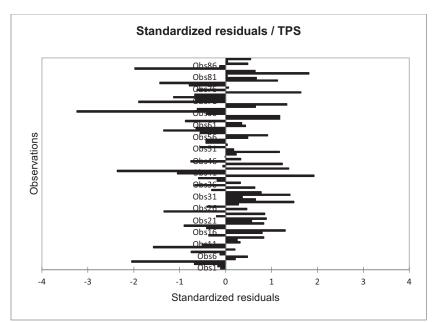


Figure E-4. Standardized residuals and observations for employee performance and transformational leadership.



APPENDIX F. LINEAR REGRESSION TRANSACTIONAL LEADERSHIP AND

EMPLOYEE PERFORMANCE

Table F-1. Summary Statistics

Variable	Observations	Obs. with missing data	Obs. without missing data	Minimum	Maximum	Mean	Std. deviation
TPS	89	0	89	2.000	5.000	3.984	0.596
CR	89	0	89	1.000	5.000	3.258	1.056
MBEA	89	0	89	1.000	5.000	3.166	0.838

Note. Summary statistics for employee performance and transactional leadership.

Table F-2. Correlation Matrix

	CR	MBEA	TPS
CR	1	0.177	0.193
MBEA	0.177	1	0.001
TPS	0.193	0.001	1

Note. Correlation matrix for employee performance and transactional leadership.

Table F-3. Multicollinearity Statistics

	CR	MBEA
Tolerance	0.969	0.969
VIF	1.032	1.032

Note. Multicollinearity statistics for employee performance and transactional leadership.

Table F-4. Analysis of Variance (TPS)

Source	DF	Sum of	Mean	F	Pr > F
Source	DI	squares	squares	1	11 / 1
Model	2	1.195	0.598	1.712	0.187
Error	86	30.023	0.349		
Corrected					
Total	88	31.218			
17		1 1 7 7 3	f (TT)		

Note. Computed against model Y=Mean(Y)



Table F-5. Goodness of Fit Statistics (TPS)

Observations Sum of	89
weights	89
DF	86
\mathbb{R}^2	0.038
Adjusted R ²	0.016
MSE	0.349
RMSE	0.591
MAPE	12.615
DW	1.921
Ср	3.000
AIC	-90.714
SBC	-83.248
PC	1.029

Note. Goodness of fit statistics for employee performance and transactional leadership.

Table F-6. Model Parameters (TPS)

Source	Value	Standard error	t	Pr > t	Lower bound (95%)	Upper bound (95%)
Intercept	3.696	0.291	12.712	< 0.0001	3.118	4.274
CR	0.112	0.061	1.850	0.068	-0.008	0.233
MBEA	-0.024	0.076	-0.320	0.750	-0.176	0.127

Note. Model parameters for employee performance and transactional leadership.

Table F-7. Standardized Coefficients (TPS)

Source	Value	Standard error	t	Pr > t	Lower bound (95%)	Upper bound (95%)
CR	0.199	0.107	1.850	0.068	-0.015	0.412
MBEA	-0.034	0.107	-0.320	0.750	-0.248	0.179

Note. Standardized coefficients for employee performance and transactional leadership.



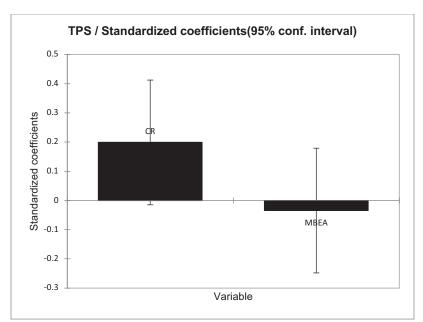


Figure F-1. Standardized coefficients for employee performance and elements of transactional leadership.

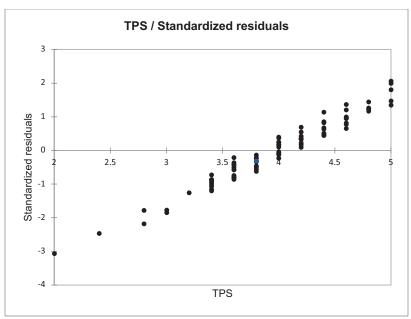


Figure F-2. Standardized residuals for employee performance and transactional leadership.

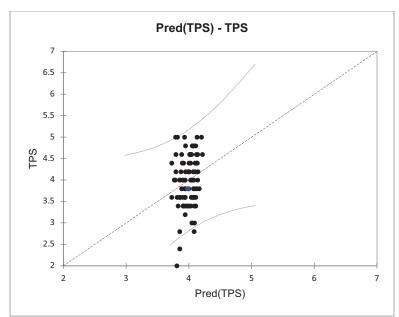


Figure F-3. Predictive analysis for employee performance and transactional leadership.

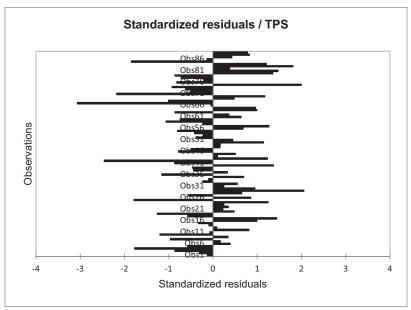


Figure F-4. Standardized residuals and observations for employee performance and transactional leadership.

APPENDIX G. LINEAR REGRESSION PASSIVE-AVOIDANT LEADERSHIP AND

EMPLOYEE PERFORMANCE

Table G-1. *Summary Statistics*

Variable	Observations	Obs. with missing data	Obs. without missing data	Minimum	Maximum	Mean	Std. deviation
TPS	89	0	89	2.000	5.000	3.984	0.596
MBEP	89	0	89	1.000	5.000	2.890	0.925
LF	89	0	89	1.000	5.000	2.486	1.028

Note. Summary statistics for employee performance and passive-avoidant leadership.

Table G-2. Correlation Matrix

	MBEP	LF	TPS
MBEP	1	0.704	-0.125
LF	0.704	1	-0.149
TPS	-0.125	-0.149	1

Note. Correlation matrix for employee performance and passive-avoidant leadership.

Table G-3. Multicollinearity Statistics

	MBEP	LF
Tolerance	0.504	0.504
VIF	1.983	1.983

Note. Multicollinearity statistics for employee performance and passive-avoidant leadership.

Table G-4. Analysis of Variance

Source	DF	Sum of squares	Mean squares	F	Pr > F
Model	2	0.717	0.358	1.011	0.368
Error	86	30.501	0.355		
Corrected					
Total	88	31.218			

Note. Computed against model Y=Mean(Y)



Table G-5. Goodness of Fit Statistics (TPS)

Observations	89
Sum of	
weights	89
DF	86
\mathbb{R}^2	0.023
Adjusted R ²	0.000
MSE	0.355
RMSE	0.596
MAPE	12.621
DW	1.960
Ср	3.000
AIC	-89.308
SBC	-81.842
PC	1.045

Note. Goodness of fit statistics for employee performance and passive-avoidant leadership.

Table G-6. Model Parameters (TPS)

Source	Value	Standard error	t	Pr > t	Lower bound (95%)	Upper bound (95%)
Intercept	4.232	0.209	20.249	< 0.0001	3.817	4.648
MBEP	-0.025	0.097	-0.264	0.793	-0.218	0.167
LF	-0.070	0.087	-0.806	0.422	-0.243	0.103

Note. Model parameters for employee performance and passive-avoidant leadership.

Table G-7. Standardized Coefficients (TPS)

Source	Value	Standard error	t	Pr > t	Lower bound (95%)	Upper bound (95%)
MBEP	-0.040	0.150	-0.264	0.793	-0.338	0.259
LF	-0.121	0.150	-0.806	0.422	-0.419	0.177

Note. Standardized coefficients for employee performance and passive-avoidant leadership.



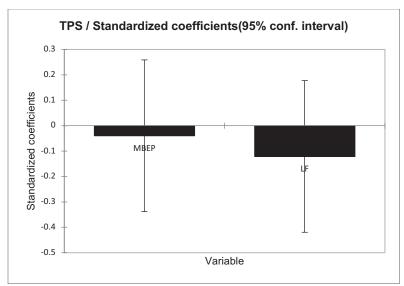


Figure G-1. Standardized coefficients for employee performance and elements of passive-avoidant leadership.

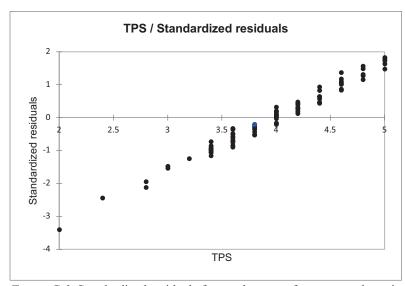


Figure G-2. Standardized residuals for employee performance and passive-avoidant leadership.

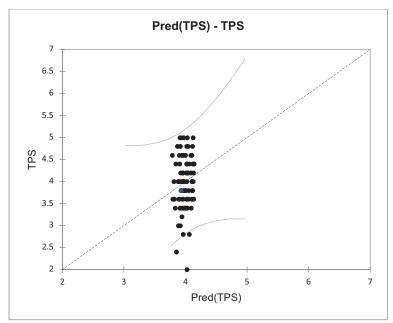


Figure G-3. Predictive analysis for employee performance and passive-avoidant leadership.

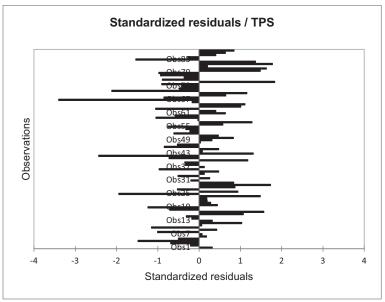


Figure G-4. Standardized residuals and observations for employee performance and passive-avoidant leadership.

APPENDIX H. DESCRIPTIVE ANALYSIS

Table H-1. Summary of Hypotheses

	Table	<i>p</i> -value	Null Hypothesis	\mathbb{R}^2
Hypothesis 1	В	0.394	Retained	0.060
Hypothesis 2	C	0.0001*	Rejected	0.194
Hypothesis 3	D	0.012*	Rejected	0.098
Hypothesis 4	E	0.007*	Rejected	0.174
Hypothesis 5	F	0.187	Retained	0.038
Hypothesis 6	G	0.368	Retained	0.023

Note. * = significant; alpha = 0.05. See also Figure 4.

Table H-2. Descriptive Analysis (Quantitative data)

Statistic	IA	IB	IM	IS	IC	CR	MBEA	MBEP	LF	EE	EFF	SAT	TIS	TPS
Nbr. of observations	89	89	89	89	89	89	89	89	89	89	89	89	89	89
Minimum	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.833	2.000
Maximum	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	4.333	5.000
Median	3.250	3.250	3.500	3.250	3.000	3.250	3.000	2.750	2.500	3.333	3.500	3.500	3.000	4.000
Mean	3.194	3.039	3.278	3.087	3.025	3.258	3.166	2.890	2.486	3.202	3.360	3.376	2.989	3.984
Variance (n-1)	1.200	0.987	1.069	0.980	1.084	1.114	0.702	0.856	1.056	1.464	1.278	1.621	0.310	0.355
Standard deviation (n-1)	1.095	0.994	1.034	0.990	1.041	1.056	0.838	0.925	1.028	1.210	1.131	1.273	0.557	0.596
Skewness (Pearson)	-0.104	-0.075	-0.223	-0.201	0.136	-0.301	-0.036	0.095	0.307	-0.297	-0.336	-0.419	0.311	-0.510
Kurtosis (Pearson)	-0.884	-0.744	-0.788	-0.833	-0.904	-0.931	-0.138	-0.284	-0.587	-0.895	-0.895	-0.918	-0.367	0.520

Note. Quantitative data for leadership behaviors, turnover intentions, and employee performance.

Table H-3. Correlation Matrix (Spearman)

Variables	IA	IB	IM	IS	IC	CR	MBEA	MBEP	LF	EE	EFF	SAT	TIS	TPS
IA	1	0.793	0.818	0.745	0.875	0.883	0.193	-0.371	-0.589	0.826	0.869	0.847	-0.241	0.157
IB	0.793	1	0.735	0.718	0.736	0.779	0.312	-0.314	-0.416	0.603	0.694	0.695	-0.188	0.121
IM	0.818	0.735	1	0.704	0.744	0.822	0.153	-0.422	-0.547	0.777	0.809	0.804	-0.229	0.185
IS	0.745	0.718	0.704	1	0.762	0.737	0.303	-0.327	-0.362	0.706	0.701	0.715	-0.204	0.147
IC	0.875	0.736	0.744	0.762	1	0.837	0.191	-0.286	-0.435	0.733	0.808	0.781	-0.252	0.309
CR	0.883	0.779	0.822	0.737	0.837	1	0.188	-0.401	-0.564	0.779	0.834	0.836	-0.251	0.194
MBEA	0.193	0.312	0.153	0.303	0.191	0.188	1	0.248	0.097	0.182	0.120	0.131	0.264	0.041
MBEP	-0.371	-0.314	-0.422	-0.327	-0.286	-0.401	0.248	1	0.705	-0.366	-0.429	-0.446	0.340	-0.139
LF	-0.589	-0.416	-0.547	-0.362	-0.435	-0.564	0.097	0.705	1	-0.541	-0.647	-0.614	0.308	-0.159
EE	0.826	0.603	0.777	0.706	0.733	0.779	0.182	-0.366	-0.541	1	0.868	0.839	-0.230	0.173
EFF	0.869	0.694	0.809	0.701	0.808	0.834	0.120	-0.429	-0.647	0.868	1	0.926	-0.250	0.182
SAT	0.847	0.695	0.804	0.715	0.781	0.836	0.131	-0.446	-0.614	0.839	0.926	1	-0.337	0.167
TIS	-0.241	-0.188	-0.229	-0.204	-0.252	-0.251	0.264	0.340	0.308	-0.230	-0.250	-0.337	1	-0.130
TPS	0.157	0.121	0.185	0.147	0.309	0.194	0.041	-0.139	-0.159	0.173	0.182	0.167	-0.130	1

Note. Values in bold are different from 0 with a significance level alpha=0.05

Table H-4. Summary Statistics

Variable	Observations	Obs. with missing data	Obs. without missing data	Minimum	Maximum	Mean	Std. deviation
IA	89	0	89	1.000	5.000	3.194	1.095
IB	89	0	89	1.000	5.000	3.039	0.994
IM	89	0	89	1.000	5.000	3.278	1.034
IS	89	0	89	1.000	5.000	3.087	0.990
IC	89	0	89	1.000	5.000	3.025	1.041
CR	89	0	89	1.000	5.000	3.258	1.056
MBEA	89	0	89	1.000	5.000	3.166	0.838
MBEP	89	0	89	1.000	5.000	2.890	0.925
LF	89	0	89	1.000	5.000	2.486	1.028
EE	89	0	89	1.000	5.000	3.202	1.210
EFF	89	0	89	1.000	5.000	3.360	1.131
SAT	89	0	89	1.000	5.000	3.376	1.273
TIS	89	0	89	1.833	4.333	2.989	0.557
TPS	89	0	89	2.000	5.000	3.984	0.596

Note. Summary statistics for leadership behaviors, turnover intentions, and employee performance.

Table H-5. Normality Tests

Variable\Test	Shapiro- Wilk	Anderson- Darling	Lilliefors
IA	0.022	0.080	0.090
IB	0.039	0.025	0.016
IM	0.034	0.065	0.015
IS	0.045	0.039	0.012
IC	0.020	0.023	0.015
CR	0.004	0.002	< 0.0001
MBEA	0.383	0.176	0.045
MBEP	0.302	0.269	0.147
LF	0.006	0.031	0.193
EE	0.001	0.003	0.002
EFF	0.002	0.006	0.028
SAT	< 0.0001	<0.0001	< 0.0001
TIS	0.052	0.028	0.032
TPS	0.016	0.054	0.120

Note. Test scores for Shapiro-Wilk, Anderson Darling, and Lilliefors.

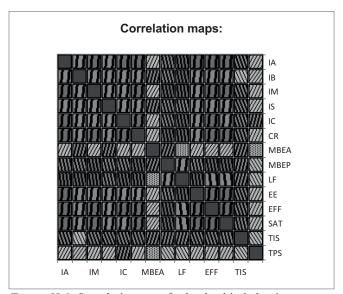


Figure H-1. Correlation map for leadership behaviors, turnover intentions, and employee performance.