

Georgia State University  
**ScholarWorks @ Georgia State University**

---

Business Administration Dissertations

Programs in Business Administration

---

Spring 5-7-2017

# Self-Directed Work Team Transition: Leadership Influence Mediates Self Determination Theory to Describe Variation in Employee Commitment

John Hoffman

Follow this and additional works at: [https://scholarworks.gsu.edu/bus\\_admin\\_diss](https://scholarworks.gsu.edu/bus_admin_diss)

---

## Recommended Citation

Hoffman, John, "Self-Directed Work Team Transition: Leadership Influence Mediates Self Determination Theory to Describe Variation in Employee Commitment." Dissertation, Georgia State University, 2017.  
[https://scholarworks.gsu.edu/bus\\_admin\\_diss/81](https://scholarworks.gsu.edu/bus_admin_diss/81)

This Dissertation is brought to you for free and open access by the Programs in Business Administration at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Business Administration Dissertations by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact [scholarworks@gsu.edu](mailto:scholarworks@gsu.edu).

## **PERMISSION TO BORROW**

In presenting this dissertation as a partial fulfillment of the requirements for an advanced degree from Georgia State University, I agree that the Library of the University shall make it available for inspection and circulation in accordance with its regulations governing materials of this type. I agree that permission to quote from, copy from, or publish this dissertation may be granted by the author or, in her absence, the professor under whose direction it was written or, in his absence, by the Dean of the Robinson College of Business. Such quoting, copying, or publishing must be solely for scholarly purposes and must not involve potential financial gain. It is understood that any copying from or publication of this dissertation that involves potential gain will not be allowed without written permission of the author.

*John J. Hoffman*

## **NOTICE TO BORROWERS**

All dissertations deposited in the Georgia State University Library must be used only in accordance with the stipulations prescribed by the author in the preceding statement.

The author of this dissertation is:

John J. Hoffman

J. Mack Robinson College of Business

Georgia State University

Atlanta, GA 30302-4015

The director of this dissertation is:

Nathan Bennett

J. Mack Robinson College of Business

Georgia State University

Atlanta, GA 30302-4015

Self-Directed Work Team Transition: Leadership Influence Mediates Self Determination Theory  
to Describe Variation in Employee Commitment

by

John Hoffman

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree

Of

Executive Doctorate in Business

In the Robinson College of Business

Of

Georgia State University

GEORGIA STATE UNIVERSITY

ROBINSON COLLEGE OF BUSINESS

2017

Copyright by  
John Hoffman  
2017

## ACCEPTANCE

This dissertation was prepared under the direction of the *JOHN HOFFMAN* Dissertation Committee. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Business Administration in the J. Mack Robinson College of Business of Georgia State University.

Richard Phillips, Dean

## DISSERTATION COMMITTEE

*Dr. Nathan Bennett (Chair)*

*Dr. Karen Loch*

*Dr. Pam Ellen*

## ACKNOWLEDGEMENTS

First, I would like to acknowledge thanks to God without whom nothing is possible. It is God that gives me the strength to do all things.

I would like to thank my wife and children for their support and sacrifices which provided the opportunity for me to complete my doctoral dissertation. My beautiful wife Lucinda is my best friend. I value our love for each other above everything else. My children are the pride of my life. There is no accomplishment I could ever achieve that would ever make me more proud than just knowing I am the father of Courtney and Andrew.

The dissertation process was demanding. I am fortunate to have a great dissertation committee. I would like to thank Dr. Nathan Bennett, Dr. Karen Loch, and Dr. Pam Ellen for providing superb guidance. I honor each of my committee members with the highest regard.  
professional mentors.

## TABLE OF CONTENTS

<b>ACKNOWLEDGEMENTS .....</b>	<b>iv</b>
<b>LIST OF TABLES .....</b>	<b>viii</b>
<b>LIST OF FIGURES .....</b>	<b>ix</b>
<b>I CHAPTER 1: INTRODUCTION .....</b>	<b>1</b>
<b>I.1 Business Challenge.....</b>	<b>1</b>
<b>I.2 Organization Structure Innovations .....</b>	<b>2</b>
<b>I.3 Current Environment is Reminiscent of “Shareholder Value Revolution” .....</b>	<b>4</b>
<b>I.4 Competitive Advantage of Work Teams.....</b>	<b>5</b>
<b>I.5 Self-Directed Work Teams.....</b>	<b>5</b>
<b>I.6 A Difficult Transformation .....</b>	<b>8</b>
<b>I.7 Research Intentions .....</b>	<b>9</b>
<b>II CHAPTER 2: EMPLOYEE COMMITMENT IS PARAMOUNT.....</b>	<b>14</b>
<b>II.1 SDWT Transitions Require Commitment.....</b>	<b>14</b>
<b>II.2 Affective Commitment Is Associated With Organizational Goals.....</b>	<b>15</b>
<b>III CHAPTER 3: SELF-DETERMINATION THEORY RELATES TO EMPLOYEE AFFECTIVE COMMITMENT .....</b>	<b>17</b>
<b>III.1 Internalization and Intrinsic Motivation .....</b>	<b>17</b>
<b>III.2 Self-Determination Theory.....</b>	<b>18</b>
<b>III.3 Affective Commitment Related to SDT .....</b>	<b>19</b>
<b>III.4 Hypotheses: Base Research Model; SDT Relates To Affective Commitment .....</b>	<b>20</b>
<b>IV ICHAPTER 4: LEADERSHIP MEDIATES THE RELATIONSHIP BETWEEN SDT AND COMMITMENT .....</b>	<b>22</b>
<b>IV.1 SDWT Transition Is Difficult For Leadership .....</b>	<b>22</b>



IV.2	Leadership Influence Tactics Impact Commitment .....	24
IV.3	Hypotheses: Influence Tactics Mediate the SDT Relationship with Affective Commitment .....	26
V	CHAPTER 5: METHODS .....	29
V.1	Research Design .....	29
V.2	Survey Instrument .....	31
V.3	Data Collection .....	33
VI	CHAPTER 6: RESULTS .....	35
VI.1	Data Analysis .....	35
VI.2	Variable Analysis .....	36
VI.3	Base Model Evaluation .....	42
VI.4	Comparison of Means – Wave 1 and Wave 2 .....	45
VI.5	PLS-SEM Path Analysis – Mediated Research Model (Wave 2).....	47
VI.6	Summary: Research Application to Case:.....	54
VI.7	Summary: Case Application to Research:.....	55
VI.8	Discussion Part 1; Contributions to Literature.....	56
VI.9	Discussion Part 2; Limitations and Opportunities for Future Research .....	59
VI.10	Discussion Part 3; Implications for Practice.....	61
VI.11	Conclusion.....	62
	APPENDICES .....	64
	Appendix A: Wave 1 Survey .....	64
	Appendix B: Wave 2 Survey .....	73
	Appendix C: Data Tables .....	82
	Appendix D: Acronym Key .....	83

<b>REFERENCES.....</b>	<b>84</b>
<b>VITA.....</b>	<b>95</b>

**LIST OF TABLES**

<b>Table 1 Influence Tactics.....</b>	<b>25</b>
<b>Table 2 Sample Characteristics .....</b>	<b>34</b>
<b>Table 3 Means and Standard Deviations .....</b>	<b>38</b>
<b>Table 4 Factor Analysis (Wave 1).....</b>	<b>40</b>
<b>Table 5 Factor Analysis (Wave 2).....</b>	<b>40</b>
<b>Table 6 Descriptive Statistics and Correlations .....</b>	<b>42</b>
<b>Table 7 Regression Analysis; Base Research Model.....</b>	<b>43</b>
<b>Table 8 Regression Analysis: Base Research Model, Control for Commitment Wave 1.....</b>	<b>45</b>
<b>Table 9 Comparison of Means .....</b>	<b>46</b>
<b>Table 10 SEM-PLS Collinearity .....</b>	<b>49</b>
<b>Table 11 Structural Model Path Coefficients (Wave 2) .....</b>	<b>49</b>
<b>Table 12 <i>Effect Size Comparison</i> .....</b>	<b>52</b>
<b>Table 13 <i>Hypothesis Testing Results</i> .....</b>	<b>53</b>

**LIST OF FIGURES**

<b>Figure 1 Research Model.....</b>	<b>13</b>
<b>Figure 2 Base Research Model.....</b>	<b>21</b>
<b>Figure 3 Mediating Model.....</b>	<b>28</b>
<b>Figure 4 Fully Expanded Research Model .....</b>	<b>38</b>
<b>Figure 5 PLS-SEM Reflective Model .....</b>	<b>48</b>
<b>Figure 6 PLS Algorithm Output.....</b>	<b>51</b>

## ABSTRACT

Self-Directed Work Team Transition: Leadership Influence Mediates Self Determination Theory  
to Describe Variation in Employee Commitment

by

John Hoffman

May 2017

Chair: Nathan Bennett

Major Academic Unit: Executive Doctorate in Business

Self-Directed Work Teams (SDWT) are strategic organization designs based on the belief that the time required to make good decisions decreases when employees are empowered to tap their tacit job knowledge. Because this strategy requires employees to think differently about the way they perform their jobs, the supervisor plays a critical role in SDWT implementations. If leaders fail to adequately manage the challenges associated with the transition to the SDWT structure, employee commitment towards the team and organization at large may suffer, putting the realization of SDWT benefits at risk. To better understand this complicated process, this research describes a field study observation designed to explore the relationship between the constructs of Self-Determination Theory (autonomy, competence, relatedness) with employee affective commitment towards a SDWT transition. Additionally, this research evaluates the mediating role leadership influence tactics has on the relationship between Self-Determination Theory and employee affective commitment towards a SDWT transition.

INDEX WORDS: Self-Directed Work Teams, Self-Determination Theory, Affective  
Commitment, Internalization, Intrinsic Motivation, Influence Tactics

## I CHAPTER 1: INTRODUCTION

### I.1 Business Challenge

Business leaders are facing a myriad of challenges during their efforts to accomplish their goals. Macroeconomic factors such as global competition (Porter, 2011), deregulation (Simmons & Elkins, 2004; Wellins, Maybe, & Iles, 1994), foreign government subsidies (Porter, 2000) and rapid economic fluctuations (Christopher, 2000; Simmons & Elkins, 2004) are factors that raise the degree of difficulty in running a profitable enterprise (Adner, Csaszar, & Zemsky, 2014; Dobni et al., 2016; Jönsson & Schölin, 2016; Porter, 2011). At the same time, market specific dynamics drive shorter life cycle products (Christopher, 2000; Wellins et al., 1994) and intermittent breakthrough technologies (Porter, 2000, 2011) increasing the difficulty in maintaining both share and margin. As a result, business leaders have implemented new strategies to improve productivity, mitigate cost, and introduce market differentiation. Many experts believe the innovative organization structures are fueling a new industrial revolution (Fisher, 2000). As one expert posited,

*"The first industrial revolution took people off of their family farms and put them into corporations organized into narrow jobs with bosses to supervise their work.*

*Conversely, the second industrial revolution makes companies act more like the family farms. Workers now run day-to-day operations with only minimal supervision. They assume numerous management tasks and are organized into flexible teams instead of rigid functional departments with narrow job descriptions." (Fisher, 2000; pg. 4)*

This research observes an organization undergoing a Self-Directed Work Team (SDWT) (Becker, 2012; Douglas & Gardner, 2004; Petty, Lim, Yoon, & Fontan, 2008; Yeatts & Hyten, 1998) transformation to evaluate the mediating effect of leadership's use of influence tactics

(Douglas, 2002; Yukl, 2002; Yukl, Kim, & Falbe, 1996) on the relationship between the three constructs of Self-Determination Theory (SDT) (Deci & Ryan, 1985) with employee affective commitment (Meyer & Allen, 1991) towards the SDWT transformation. This study tests the belief that the three constructs of SDT (autonomy, competence, relatedness) have a positive relationship with employee affective commitment towards the SDWT transformation.

Leadership influence tactics occur in the workplace in the form of both hard influence tactics and soft influence tactics. This study tests the belief that hard influence tactics mediate the relationship between SDT and affective commitment where this relationship becomes less positive. Additionally, this research tests the belief that soft influence tactics mediate the relationship between SDT and affective commitment where this relationship becomes more positive.

## **I.2 Organization Structure Innovations**

The twentieth century is witnessing social transformations and companies are responding with new organization structures (Drucker, 1995; LaFollette, Hornsby, Smith, & Novak, 2008). Business leaders are implementing new organization structures to improve performance (Baiden, Price, & Dainty, 2003; Becker, 2012; Douglas & Gardner, 2004; Janz, 1999). As one observer noted,

*“Growing environmental changes are impacting modern organizations as never before. Technological advances continue to fuel a rapidly changing environment. As in the past, managers dealt with change, but the complexity of the current problems presented and the tools needed to deal with them exceed the resources of the most competent managers. As a result, the importance of creating and fostering an organization that is both flexible and responsive has been heightened. One of the approaches that many companies are*

*adopting to become more flexible and responsive is that of work teams.” (LaFollette et al., 2008; pg. 55)*

Business leaders that keep their organizations structurally stagnant during this period will do so at their peril. As global competition and economies are expanding, old standards of performance are being surpassed with innovative organization structures (Levine, Leholm, & Vlasin, 2001). Labor productivity is important to remain competitive. The cost of middle management is a major factor driving business leaders to remove hierarchical layers, increasing the direct labor employee involvement and pushing decisions to a lower layer (Baiden et al., 2003; Daft & Lewin, 1993; Harris & Raviv, 2002). By moving decisions closer to the point of value creation, work teams strategically improve labor productivity, manufacturing waste, and decision agility (Douglas, 2002). Business leaders are restructuring their organizations from traditional structures to work teams to realize these improvements (Baiden et al., 2003; Janz, 1999).

The strategy to shift to work teams is advancing. An Industry Week magazine survey found that over 25 percent of U.S. companies use work teams (Wellins et al., 1994). As reported,

*“Work teams perform better because they (a) present a broader mix of skills and knowledge needed to respond to multifaceted challenges of innovation, quality and customer satisfaction; (b) are able to adjust better and quickly to new information due to the joint development of goals and approaches and the establishment of communication; (c) help build trust and confidence and provide the appropriate social dimension that enhances economic and administrative aspects of work; (d) have fun and that helps*



*members to deal with pressures and intensity of high performance required of them.”*

*(Baiden et al., 2003; pg. 102)*

### **I.3 Current Environment is Reminiscent of “Shareholder Value Revolution”**

Separation of investor ownership and management control creates a potential for an agency problem, where managers work toward advancing their personal value and indirectly work toward improving shareholder value. Introducing work teams is a strategic action to minimize the cost of management and increase shareholder value (Baiden et al., 2003; LaFollette et al., 2008; Schilder, 1992; Yeatts & Hyten, 1998). An agency problem exists where business leaders drive multiple layers of management for job security and promotional opportunities instead of introducing work teams to minimize management costs and maximize shareholder value.

Business leaders and shareholders experienced an agency correction in the 1990s. Business leaders were separating their compensation from the variation in the open market at the cost of shareholder value. This situation provides business leaders an undeserved benefit of job security, unused labor resources and substantial compensation (Goldstein, 2012). A “Shareholder Value Revolution” (Goldstein, 2012) took place during the early 1990s, triggering new organization structures.

Work teams are one of the many organizational innovations that spawned from the Shareholder Value Revolution. High performing work teams were introduced to reduce management costs (Osterman, 2000; Yeatts & Hyten, 1998). Management layers downsized and direct labor operated with more autonomy (Osterman, 2000; Rajan & Wulf, 2006). Work teams were injected into lower levels reducing middle management (Osterman, 2006).

The current market conditions are reviving shareholder profit concerns (Goldstein, 2012). Shareholders expect organizational innovations to drive labor productivity (Goldstein, 2012). Our highly competitive markets require innovative organizations to increase agility and drive more autonomy to lower levels in organizations (Rajan & Wulf, 2006). Implementing work teams is once again an important strategic initiative to maximize shareholder value in challenging economic environments (Goldstein, 2012).

#### **I.4 Competitive Advantage of Work Teams**

Work teams provide positive labor productivity, less manufacturing waste, less absenteeism, rapid responsiveness and manufacturing agility (Baiden et al., 2003; Douglas, 2002; Janz, 1998; LaFollette et al., 2008). Organizations invest in work teams because research shows teams outperform individuals acting alone (Baiden et al., 2003; Hayes, 2002), especially when work requires agility across several skills and abilities (Baiden et al., 2003; Katzenbach & Smith, 1993; Stewart & Barrick, 2000). Business leaders are removing confined job responsibilities and implementing work teams because they are more flexible, productive and contribute to financial results (Baiden et al., 2003; Katzenbach & Smith, 1993). Increased sales and earnings occur as work teams mature (LaFollette et al., 2008). Work teams are a viable competitive strategy that address the issues in the current manufacturing environment.

#### **I.5 Self-Directed Work Teams**

Business leaders that implement SDWTs are adopting the most decentralized version of an empowered workforce (Becker, 2012; Wellins et al., 1994). A SDWT is a group of direct labor employees with complementary skills that work together to accomplish work tasks and set future goals (Fisher, 2000; LaFollette et al., 2008; Levine et al., 2001; Yeatts & Hyten, 1998). A SDWT has work that concentrates on processes instead of functions and the SDWT focuses on

team efforts instead of individual (Dwyer, 1995; LaFollette et al., 2008). The responsibilities of a SDWT are broad in scope. Members of SDWTs typically handle job assignments, schedule work, make production-related decisions, and take action on problems with minimal direct supervision (Becker, 2012; Fisher, 2000; Petty et al., 2008; Wellins et al., 1994). Business leaders that maintain a traditional organization structure depends on the Human Resource department for changes in headcount and direct labor training. Implementing SDWTs mitigates the Human Resource's employment and training activity.

As SDWTs mature, tactical management activities migrate from supervisor to SDWT (Douglas & Gardner, 2004; LaFollette et al., 2008). The day-to-day work for a supervisor transitions to continuous improvement (Douglas & Gardner, 2004; Fisher, 2000; LaFollette et al., 2008; Yeatts & Hyten, 1998). A mature SDWT works autonomously and performs tactical functions to address the team's objectives (LaFollette et al., 2008). Mature SDWTs eventually accept new authority for production planning, hiring, onboarding, capital equipment and customer interfacing (Levine et al., 2001). Refined SDWTs empower team members in selecting new members, disciplining other team members, writing formal peer evaluations, coordinating daily production schedules, cross-training and scheduling vacations (Becker, 2012).

SDWTs are beneficial but there are dangers in decentralizing decisions and increasing direct labor autonomy. Members of a SDWTs sometimes display depression as job stress increases (Parker, 2003). Alternatively, some direct labor employees have disappointment that the SDWT does not fully meet their needs for self-direction (Paul, Niehoff, & Turnley, 2000). These direct labor employees perceive an unmet psychological contract (Rousseau, 1989) with the business leaders and supervisors. Direct labor employees perceive a breach where autonomy is promised in return for an expanded work scope, but are disenfranchised that the autonomy

given is an unequal exchange for a broader scope of work for direct labor (Paul et al., 2000). Finally, decentralizing authority sometimes demotivates supervisors from doing essential duties (Eccles, 1993). Granting SDWTs more autonomy does not mitigate all supervisor responsibilities (Eccles, 1993). Business leaders need to take caution when implementing SDWTs (Eccles, 1993; Parker, 2003). To provide clear boundaries and expectations, the SDWTs need to understand the metrics of success (Paul et al., 2000).

Work metrics are an example of an effective tool to keep direct labor employees working on similar goals (Melnyk, Stewart, & Swink, 2004). Managers harness the abilities of a direct labor workforce by translating the organization's mission into target conditions and performance metrics (Melnyk et al., 2004). The "Advanced Manufacturing Technology" (AMT) standard (Boyer & Pagell, 2000; Ward, McCreery, Ritzman, & Sharma, 1998) highlights Quality, Delivery, Cost, and Responsiveness as critical manufacturing metrics. Many manufacturing business leaders blend the AMT standards with the guidance of Lean Manufacturing (Womack, Jones, & Roos, 1990) experts and use Safety, Quality, Delivery, Responsiveness and Cost (SQDRC) as the metrics of success (Womack et al., 1990). The observed organization in this study uses SQDRC as the primary metrics of success for manufacturing.

There is risk in decentralizing decisions, but business leaders harvest rewards from implementing SDWTs. The Miller Brewing Company recognizes positive productivity in excess of 30% when implementing SDWTs (Becker, 2012). In the case of the Harris Semiconductor, implementation of SDWTs yielded a 15% increase in first pass yield (FPY) and cut cycle time by over 60% during the first two years (Behnke, Hamlin, & Smoak, 1993). Xerox Corporation plants with SDWTs are 30% more productive in comparison to traditionally organized Xerox Corporation plants (LaFollette et al., 2008; Moran & Musselwhite, 1993). Proctor & Gamble

Company has eighteen plants with SDWTs and recognizes 30% - 40% more productivity in these eighteen plants (LaFollette et al., 2008; Moran & Musselwhite, 1993).

## **I.6 A Difficult Transformation**

SDWTs address inefficiencies found in traditional organization structures. The fundamental purpose of SDWTs is to break down barriers in the organization (Douglas, 2002; LaFollette et al., 2008; Yeatts & Hyten, 1998). Successfully implementing SDWTs means traditional organization lines are broken (Daft & Lewin, 1993; Douglas, 2002; Douglas & Gardner, 2004). Traditional work units have managers who make all critical decisions, while SDWTs use consensus decision-making to determine how the work will be done (Becker, 2012). Changing to a SDWT structure requires a new employee mindset and company philosophy.

Employees face significant change during a SDWT transition. SDWT maturity is a slow and arduous process (LaFollette et al., 2008). An organization's decision to implement SDWTs may be met with resistance from workers who feel that gains in productivity will ultimately render their jobs obsolete (LaFollette et al., 2008).

Forming a group of employees into a team is not a transition to a SDWT environment. A group of employees need to act cohesively as a working team for an organization to realize SDWT benefits. A successful SDWT members shares skills, plays multiple roles, tackles complex problems and communicates openly (Baiden et al., 2003). A SDWT has synergies that make the team efforts more effective than individual efforts (Baiden et al., 2003; Scarnati, 2001). SDWT members are open to learning new technical, interpersonal, and administrative skills (LaFollette et al., 2008).

SDWTs are both difficult to implement and beneficial to operate. During the transition, SDWT employees experience significant changes and business leaders are required to navigate

their employees through the SDWT modifications. Business leaders and direct labor employees must prepare for the change when entering the SDWT transition phase. A successful SDWT transition is an antecedent to recognizing the many benefits of a SDWT work environment.

## **I.7 Research Intentions**

In the book “High-Performing Self-Managed Work Teams” (Yeatts & Hyten, 1998), Yeatts and Hyten report findings of a 3-year study on SDWTs. Their research lays the groundwork for high performing teams. This seminal work is the basis for years of research on the benefits of SDWTs. SDWT are positively related to job satisfaction (Foote & Li-Ping Tang, 2008; Kirkman & Rosen, 1999; Kirkman & Shapiro, 2001), cost efficiencies (Ghiselli & Ismail, 1996; Hackman & Wageman, 1995; T. E. Harris, 1992; Manz & Sims, 1993) and innovations (Glassop, 2002; Hickman & Creighton-Zollar, 1998; Versteeg, 1990). However, research on the difficulty to transition to a SDWT environment is lacking. Business leaders that attempt to implement SDWTs realize that the old “command and control” structure is eliminated during the transition (Douglas, 2002; LaFollette et al., 2008; Yeatts & Hyten, 1998). The elimination of the traditional organizational structure causes confusion and frustration with employees that do not want to transition to a more autonomous work environment (LaFollette et al., 2008). The SDWT transition period is the gap in literature that this research address.

Research is required to address the issues that occur during a SDWT transition. Practitioners are woefully unprepared to undertake the significant change from traditional organizational structures (LaFollette et al., 2008). This research provides a comprehensive empirical account of organizational learning from a field observation. The practical account will advance the current literature on SDWTs towards the topic of SDWT implementation. This study quantitatively evaluates critical issues to manage during a SDWT transition. As a

contribution to practice, this research provides a learning model for implementing a SDWT structure.

The relationship between the three constructs of SDT (autonomy, competence, relatedness) with employee affective commitment is the basis of the learning model in this research. Current SDT literature emanates from the book “Intrinsic Motivation and Self-Determination in Human Behavior” (Deci & Ryan, 1985). Deci and Ryan posit that human intrinsic motivation is precipitated by perceptions of autonomy, competence, and relatedness (Deci & Ryan, 1985). This research challenges the SDT premise with a sample population that is composed of direct labor employees. SDT literature generalizes to all human behavior but researches in populations that are heavily weighted towards students, teachers, and professionals. SDT and the basic needs at work scale research uses professional and convenience-sample populations to develop test instruments and theory. This research challenges SDT literature by evaluating a population entirely composed of direct labor employees. Direct labor populations are expected to behave differently than the behavior of professional and convenience-sample populations. As a contribution to literature, this research evaluates the behavior of a direct labor population as it pertains to the relationship between employee needs at work and affective commitment to an organizational change. As a contribution to practice, this research identifies critical employee perceptions that nurture employee commitment to a SDWT transition.

Leadership’s interactions with direct labor employees create an environment where employees commit to organizational changes (LaFollette et al., 2008; Yukl, 2002; Yukl et al., 1996). Leader Member Exchange (LMX) theory is the study of a dyadic relationship between employee and leader (Gerstner & Day, 1997; Graves, 2013). LMX research finds that higher rated relationships are found in work environments with increased job satisfaction, member

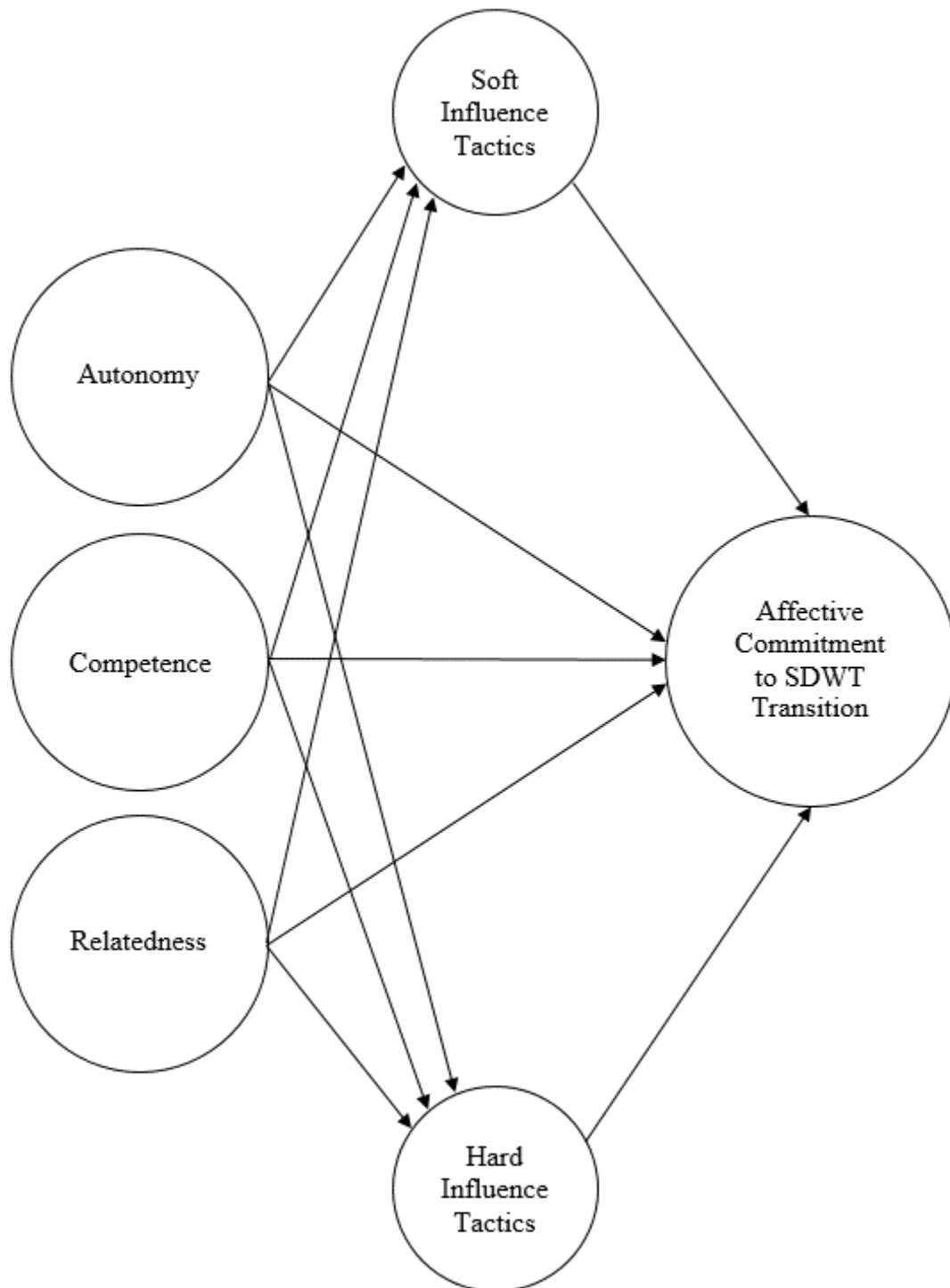
competence, and employee commitment (Gerstner & Day, 1997). LMX theory is positively related to SDT (Graves, 2013), where higher rated relationships between leader and employee are found to be positively related to increased levels of employee perceived autonomy, competence, and relatedness. Positive relationships between leader and employee create a work environment where employees feel free to invest themselves into work issues (Douglas, 2002; Graves, 2013).

As a more granular evaluation of the dyadic relationship between employee and leader, this research tests leadership's use of hard influence tactics and soft influence tactics as a mediator on the relationship between the constructs of SDT and affective commitment. Hard influence tactics and soft influence tactics are antecedents to employee to leader relationships (Douglas, 2002, 2006). As a contribution to literature, influence tactics are evaluated as a mediator to the SDT and affective commitment relationship, as influence tactics create a work environment that enable or prevent this relationship. This research provides a quantitative evaluation of influence tactics as a more granular explanation of the expected positive relationship between LMX and SDT (Graves, 2013). As a contribution to practice, the importance leader soft skills are evaluated as these skills impact the perceptions of employees and the eventual commitment to a SDWT transition.

The following three chapters divide the literature review into three parts. In chapter 2 this research identifies employee commitment as the paramount issue during a SDWT transition. Employee affective commitment is the dependent variable within the learning model. The Three Component Model (TCM) (Meyer & Allen, 1991, 2004; Meyer, Allen, & Smith, 1993) is the instrument for evaluating employee commitment towards the goals of an organization. In chapter 3 this research introduces the constructs of SDT as the key independent variables relating



to employee affective commitment to a SDWT transition. The key constructs of SDT are autonomy, competence, and relatedness as perceived by the employees that are transitioning to a SDWT structure. The Basic Psychological Needs Scale (Broeck, Vansteenkiste, Witte, Soenens, & Lens, 2010; Deci & Ryan, 1985; Gagné & Deci, 2005; Graves, 2013) measures the perceptions of employees as they related to autonomy, competence, and relatedness in their newly formed SDWT. This research leverages a broad literary base on SDT to support hypotheses on the relationship between the constructs of SDT and employee affective commitment towards a SDWT transition. In chapter 4 this research introduces the mediating effect of leadership. Influence tactics that are sanctioned by leadership have a mediating effect on the relationship between the constructs of SDT and employee affective commitment towards an SDWT transition. The Influence Behavior Questionnaire (IBQ) (Yukl et al., 1996; Yukl, Seifert, & Chavez, 2008) evaluates the mediating impact of leadership's use of influence tactics. This research leverages a broad literary base on influence tactics to support hypotheses that reveal hard influence tactics and soft influence tactics as mediators.

**Figure 1 Research Model**

## II CHAPTER 2: EMPLOYEE COMMITMENT IS PARAMOUNT

### II.1 SDWT Transitions Require Commitment

Employee commitment is an important aspect of organizational goal obtainment (Kirkman & Rosen, 1999; Mowday, Porter, & Steers, 2013) and is critical for business leaders to maintain during times of organizational change (Douglas, 2002; Foote & Li-Ping Tang, 2008). Commitment mediates the relationships between employee behavior and desired outcomes (Bishop, Scott, & Burroughs, 2000). Team commitment is necessary because extra effort is needed when transitioning to a SDWT structure (Douglas, 2002). Team commitment has a positive relationship with employee behaviors that are critical during a transition to work teams (Foote & Li-Ping Tang, 2008).

Specific to a SDWT transition, employee commitment is necessary for direct labor employees to accept the change to work teams (Kirkman & Rosen, 1999; Mowday et al., 2013). Both direct labor employees and business leaders experience significant changes during a SDWT transition (LaFollette et al., 2008). Research indicates the benefits of SDWTs are related to employee commitment during the transition (T. E. Becker, 1992; Bishop et al., 2000). Task commitment stemming from the newly formed SDWT is a critical factor in the success of a SDWT transition (Foote & Li-Ping Tang, 2008; Pearce & Ravlin, 1987). The reverse is also true. Teams lacking commitment are unable to navigate through a SDWT transition (Foote & Li-Ping Tang, 2008). As part of successful SDWT implementation plans, business leaders develop strategies that increase direct labor employee commitment (Douglas, 2002; Foote & Li-Ping Tang, 2008).

## II.2 Affective Commitment Is Associated With Organizational Goals

The TCM (Meyer & Allen, 1991) is the most widely used instrument measuring employee commitment (Meyer & Allen, 1991, 2004). Employee commitment requires intrinsic agreement before employees display commitment behavior (Meyer et al., 1993; Meyer, Becker, & Vandenberghe, 2004). Employee commitment stems from the employees' psychological state of mind (Meyer & Allen, 1991, 2004; Meyer et al., 1993; Meyer et al., 2004). Employee commitment is a psychological state; that has at least three components reflecting desire, need, and obligation (Meyer & Allen, 1991). All three forms of commitment bind an individual to a course of action (Meyer & Allen, 2004). The three components of the TCM have specific behavioral traits. Meyer & Allen defined the behavior of the three components;

“Affective commitment refers to the employee's emotional attachment to, identification with, and involvement in the organization. Employees with strong affective commitment continue employment with the organization because they want to do so. Continuance commitment refers to an awareness of the costs associated with leaving the organization. Employees that have a primary link to the organization that is based on continuance commitment remain because they need to do so. Normative commitment reflects a feeling of obligation to continue employment. Employees with a high level of normative commitment feel that they ought to remain with the organization.” (Meyer & Allen, 1991; pg. 67)

Affective, continuance, and normative commitment vary in the depth of effort given to an organizational change (Meyer et al., 1993; Meyer et al., 2004). Affectively committed employees exert more effort to organizational changes in comparison to continuance and normative commitment (Meyer & Allen, 1991). During organizational changes, affective commitment is the most salient component in the TCM (Allen & Meyer, 1996; Galletta,

Portoghese, & Battistelli, 2011; Herscovitch & Meyer, 2002; Meyer & Allen, 1991). Affective commitment is based on personal values and is a stronger binding force in a team when compared to normative and continuance commitment (Meyer & Allen, 2004). During a SDWT transition, affective employee commitment is the most critical employee behavior to foster in the direct labor workforce (Foote & Li-Ping Tang, 2008).

### **III CHAPTER 3: SELF-DETERMINATION THEORY RELATES TO EMPLOYEE AFFECTIVE COMMITMENT**

#### **III.1 Internalization and Intrinsic Motivation**

Internalization is the process that individuals follow to transform external requests to personally endorsed actions (Deci & Ryan, 2000). Employees internalize leadership commands when employees translate external demands into personal actions (Deci & Ryan, 1985). Employees must internalize the concept of an organizational structure change as an antecedent to independent employee work towards the change (Deci & Ryan, 1985; Deci, Vallerand, & Pelletier, 1991). A successful SDWT transformation requires direct labor employees to first internalize leadership's vision for a team based work environment (Galletta et al., 2011).

Intrinsic motivation is the output of internalizing external requests (Deci & Ryan, 1985, 2000). Intrinsic motivations describe the natural inclination toward assimilation, mastery, spontaneous interest, and exploration (Deci & Ryan, 1985, 2000). An intrinsically motivated employee accepts organizational goals and commits to accomplishing the organizational goals (Gagné & Deci, 2005). Business leaders prefer intrinsically motivated employees because intrinsically motivated employees work diligently without supervision or recognition (Deci & Ryan, 1985; Gagné & Deci, 2005). Intrinsically motivated employees are working to accomplish a task that is perceived as self-imposed even though the antecedent was an externally driven request from leadership (Deci & Ryan, 1985, 2000; Deci, Vallerand, Pelletier, & Ryan, 1991; Gagné & Deci, 2005; Meyer et al., 1993). A successful SDWT transformation requires employees to internalize the vision of work teams and grow intrinsic motivation towards the success of the organizational change (Deci & Ryan, 1985, 2000; Yeatts & Hyten, 1998). During a SDWT transition, employees require intrinsic motivation to explore new job processes and

work methods (Fisher, 2000; LaFollette et al., 2008; Levine et al., 2001; Yeatts & Hyten, 1998). Intrinsically motivated employees will self-regulate their actions to support the internalized vision (Deci & Ryan, 1985; Deci, Vallerand, & Pelletier, 1991). During a SDWT transition, team members internalize the work team vision from leadership, develop intrinsic motivation to the task, and self-regulate their actions toward the success of the work team.

### **III.2 Self-Determination Theory**

Intrinsic motivation is critical to explain self-determined behavior (Deci & Ryan, 1985; Gagné & Deci, 2005). Employees that display self-determined behavior do so because they are intrinsically motivated to a purpose (Deci & Ryan, 1985, 2000; Deci, Vallerand, & Pelletier, 1991; Gagné & Deci, 2005). Self-determined employees experience their actions as volitional, intentional, and self-initiated (Deci & Ryan, 1985; Deci, Vallerand, & Pelletier, 1991). A self-determined employee accepts external guidance, transforms guidance to personal values, and acts with self-motivation. The process of changing extrinsic guidance into intrinsic motivation is the antecedent to self-determined behavior (Fernandez & Moldogaziev, 2013).

Self-Determination Theory (SDT) is arguably the most widely-recognized framework for understanding the dynamics of self-determination behavior at work (Deci & Ryan, 1985; Gagné & Deci, 2005; Graves, 2013). SDT posits that employees have specific psychological needs as essential nutrients for psychological well-being (Deci & Ryan, 2000). When employees perceive their psychological needs met, they internalize organizational goals and display self-determined behavior (Deci & Ryan, 1985, 2000; Deci et al., 2001; Gagné & Deci, 2005; Graves, 2013). Self-determined employees perceive their needs met for autonomy, competence, and relatedness at work (Deci & Ryan, 1985, 2000; Deci et al., 2001; Deci, Vallerand, & Pelletier, 1991; Gagné & Deci, 2005; Graves, 2013).

Autonomy is being the owner of one's actions (Deci & Ryan, 1985; Deci et al., 2001; Deci, Vallerand, & Pelletier, 1991; Graves, 2013). Employees that perceive themselves as working autonomously believe that they are acting with a sense of freedom of choice (Graves, 2013). Freedom of choice is important but employees must own the right to execute self-determined decisions to fully perceive themselves as working autonomously (Deci & Ryan, 2000; Van den Broeck, Vansteenkiste, & De Witte, 2008).

Competence is understanding how to successfully complete tasks when given a specific set of current state conditions (Deci & Ryan, 1985; Deci et al., 2001; Deci, Vallerand, & Pelletier, 1991; Graves, 2013). Employees that perceive themselves as working competently believe they are capable at their work (Deci & Ryan, 1985). Perceptions of competence are satisfied when employees understand how to navigate through work complications to successfully achieve work objectives (Baard, Deci, & Ryan, 2004; Deci, Vallerand, & Pelletier, 1991; Graves, 2013).

Relatedness is socially connecting with peers at work (Deci & Ryan, 1985; Deci et al., 2001; Deci, Vallerand, & Pelletier, 1991; Graves, 2013). Relatedness provides employees the ability to build group coalition and inter-group support for employees (Deci & Ryan, 1985; Graves, 2013). Employees that perceive themselves as working on a related team have interpersonal connections to peer employees (Deci et al., 2001; Deci, Vallerand, & Pelletier, 1991; Graves, 2013; Van den Broeck et al., 2008) and believe they are completing tasks for the greater purpose of the related team (Deci & Ryan, 1985).

### **III.3 Affective Commitment Related to SDT**

Organizational commitment is a consequence of self-management (Chen & Chung, 2014). Intrinsically motivated employees have a higher success rate in accomplishing objectives



(Meyer & Allen, 2004). Commitment is maximized when employees perceive their needs are satisfied for autonomy, competence, and relatedness (Deci, Vallerand, & Pelletier, 1991).

Autonomy, competence, and relatedness are related to commitment to organizational change (Deci, Vallerand, & Pelletier, 1991).

Affective commitment is correlated to SDT, as affective commitment is positively related to intrinsic behavior (Galletta et al., 2011). An employee's desire to work on self-imposed tasks is related to affective commitment (Meyer & Allen, 1991). Affective commitment is related to employee psychological needs in the work place (Allen & Meyer, 1996; Galletta et al., 2011). Individuals who affectively commit, experience more self-determination and have a stronger focus towards task completion (Meyer & Allen, 2004).

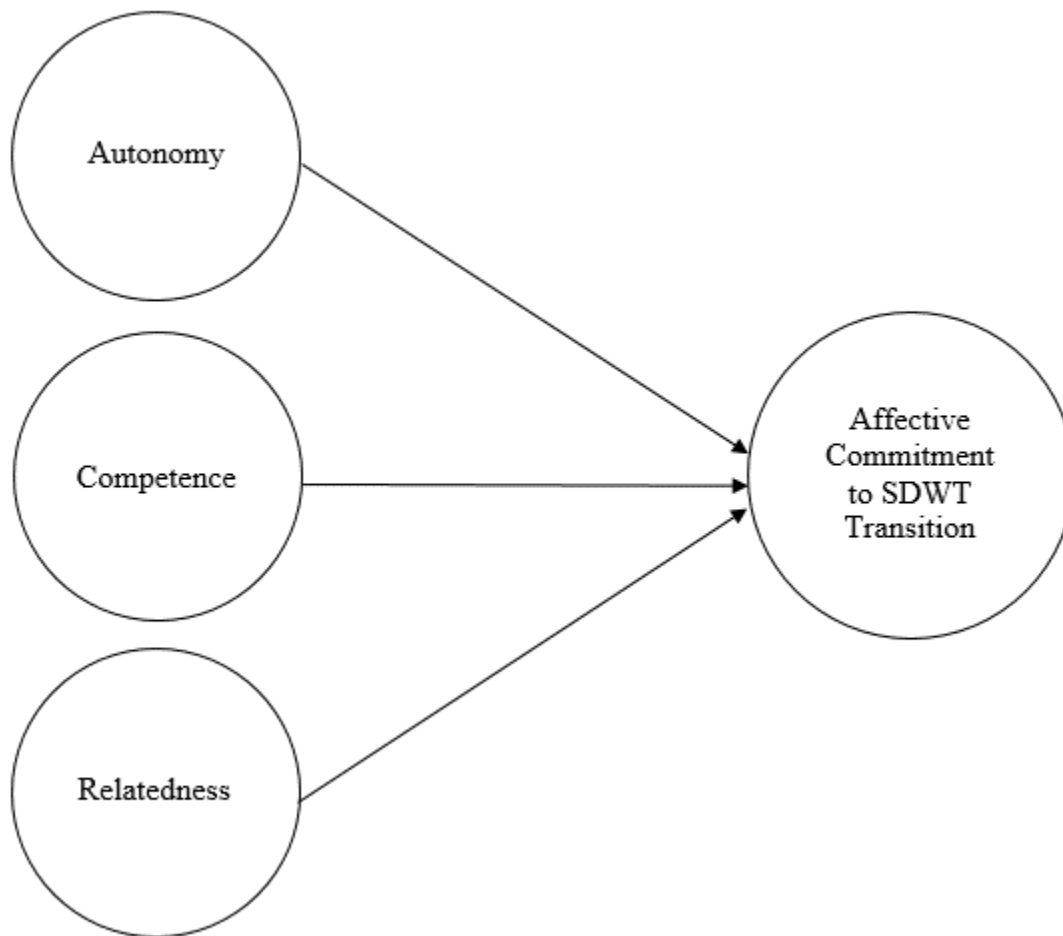
#### **III.4 Hypotheses: Base Research Model; SDT Relates To Affective Commitment**

The perceived fulfillment of an employee's psychological needs at work has a positive relationship with an employee's affective commitment to a SDWT transition where ...

H1a – Autonomy has a positive relationship with affective commitment.

H1b – Competence has a positive relationship with affective commitment.

H1c – Relatedness has a positive relationship with affective commitment.

**Figure 2 Base Research Model**

## **IV CHAPTER 4: LEADERSHIP MEDIATES THE RELATIONSHIP BETWEEN SDT AND COMMITMENT**

### **IV.1 SDWT Transition Is Difficult For Leadership**

Business leaders choose to implement SDWTs to obtain a competitive advantage. SDWTs increase agility and responsiveness by breaking down barriers between job functions (Fisher, 2000). SDWT transformations are purposefully disruptive to traditional organizational structures (Douglas, 2002, 2006). The change in structure to a SDWT environment has a significant impact on leadership (Douglas & Gardner, 2004). SDWTs work towards team consensus where traditional organizational structures depend on leadership to make daily production decisions (Becker, 2012). Managers are required to use different leadership behaviors during an organizational change (Manz & Sims, 1993; Manz & Sims Jr, 1987). Leaders have difficulty changing their management behavior during a SDWT transition (Douglas & Gardner, 2004). Leadership has difficulty in accepting the new SDWT structure because their traditional leadership experiences is counterintuitive to their new role (LaFollette et al., 2008).

Leadership behavior is related to employee commitment (Meyer & Allen, 2004). Responsiveness to employees' requests help employees internalize organizational objectives (Deci & Ryan, 2000). The internalization process and employee commitment are mitigated when the employees' needs are unmet (Deci & Ryan, 2000). Leadership behavior is important to satisfy employees' needs at work (Deci & Ryan, 2000; Gagné & Deci, 2005; Van den Broeck et al., 2008). Successful leaders give positive feedback and promote initiative which is essential in building SDWTs (Baard et al., 2004; Gagné & Deci, 2005; Van den Broeck et al., 2008).

Leaders go through significant change during a SDWT transition (Douglas, 2002; Douglas & Gardner, 2004). During the transition to work teams, leaders are moving from the

role of director to that of facilitator (Edmondson, 1999; LaFollette et al., 2008). As a change from the norm, leaders must provide resources, training and encouragement to the newly formed SDWTs (Manz & Sims, 1993; Manz & Sims Jr, 1987; Yeatts & Hyten, 1998). Changes in role responsibility during a SDWT transition is difficult for leaders (Douglas, 2002). Leaders that prefer command and control structure are confused when transitioning to SDWTs (Hirschhorn, 2002). Leadership resistance is a common failure mode during a SDWT transition (LaFollette et al., 2008). Transitioning to SDWTs requires leaders to shift power and responsibility to SDWT members (Douglas & Gardner, 2004; Kirkman & Rosen, 1999). Leader behavior is related to the employees' psychological needs and organizational commitment (Deci et al., 2001; Gagné & Koestner, 2002).

Business leaders struggle to implement SDWTs. Over 25 percent of Northern Telecom's supervisors departed the company after implementing SDWTs (LaFollette et al., 2008; Versteeg, 1990). The supervisors at Harris Semiconductor neglected the needs of the employees during a SDWT transition which compromised the success (Behnke et al., 1993).

During a SDWT transition, there are two main leadership failure modes. The first failure mode is under-engaged leadership while the second failure mode is over-engaged leadership. As one expert writes,

*“Some managers overcompensate and fail to provide proper direction. Leadership gets too far removed from a team's activities. New teams are often highly motivated but have no clear direction. Often simple, but consequential, tasks and direction in the early going help the employee gain confidence and experience in the new approach. However, too much direction can also lead to management indulgence. Responding to an urgent*

*need for SDWT success, management stakeholders may unwittingly promote their own agenda and therefore stifle open discussion of ideas” (Lafollette et al., 2008; pg. 59)*

## **IV.2 Leadership Influence Tactics Impact Commitment**

Extrinsic factors drive change and action. During organizational change periods, extrinsic factors normally have a negative relationship with employee commitment (Yukl, 2002; Yukl et al., 1996). Conversely, intrinsically motivated behaviors promote strong employee commitment towards organizational changes (Douglas, 2002; Yukl, 2002). Internal agreement is an antecedent to employees becoming intrinsically motivated (Falbe & Yukl, 1992; Yukl, 2002; Yukl et al., 1996). During a SDWT transition, leadership must collaborate with the newly formed SDWTs to obtain the employees’ internal agreement and promote intrinsic motivation.

Leadership behavior is an essential element to employee intrinsic motivation (Douglas, 2002, 2006; Yukl, 2002; Yukl et al., 1996; Yukl & Tracey, 1992). Task commitment is more apt to occur when leadership uses consultation, inspirational appeals and rational persuasion (Yukl, 2002; Yukl et al., 1996). Intrinsic motivation is positively related to commitment to an organizational change (Galletta et al., 2011; Yukl, 2002; Yukl et al., 1996).

Employee responses to leaderships' influence tactics range from resistance to commitment (Yukl, 2002; Yukl et al., 1996). Nine different types of leadership influence tactics yield varying positive and negative relationships with task commitment (Falbe & Yukl, 1992; Yukl, 2002; Yukl et al., 1996; Yukl & Tracey, 1992). The nine influence tactics are shown in Table 1.

**Table 1 Influence Tactics**

<i>Influence Tactic</i>	<i>Description</i>
Consultation	An effort to involve the target person in the planning of specific details and action steps of policy, strategy, or decision.
Inspirational Appeals	Requests or proposals that arouse enthusiasm by appealing to the target person's values, ideas, and aspirations, thus increasing confidence.
Rational Persuasion	Facts and data to support the development of a logical argument.
Personal Appeals	Using the target person's personal relationship as the basis for agreement.
Ingratiation	Impression management, flattery, the creation of goodwill, acting humble, and making others feel important
Pressure	A forceful approach that includes being demanding and setting deadlines.
Coalition	Attempting to stop the target person from carrying out some action by various kinds of tactics, such as threatening to stop working with the target person.
Legitimizing	Gaining the support of higher levels of the organization to back up requests
Exchange	Negotiating through the sharing of benefits or favors

(Yukl &amp; Tracey, 1992)

Influence tactics sub-divide into negative leadership behaviors and positive leadership behaviors. Negative leadership behavior is characterized as hard influence tactics, while positive leadership behavior is characterized as soft influence tactics (Yukl, 2002; Yukl et al., 1996). The key difference between hard influence tactics and soft influence tactics is employee perception of choice (van Knippenberg & Steensma, 2003). Employees perceive the right to decide when leaders use soft influence tactics (van Knippenberg & Steensma, 2003). Hard influence tactics

use positional power and manipulation (Falbe & Yukl, 1992). Soft influence tactics involve the use of personal power and power sharing (Falbe & Yukl, 1992).

Specific influence tactics are directionally related to employee commitment (Yukl, 2002; Yukl & Tracey, 1992). Soft influence tactics are positively related task commitment (Yukl, 2002; Yukl & Tracey, 1992). Hard influence tactics are the least effective to improve task commitment (Falbe & Yukl, 1992; Yukl, 2002). A leaders's use of hard influence tactics arouses suspicion about the manager's concern for subordinate interests (Douglas, 2006; Tepper, Eisenbach, Kirby, & Potter, 1998; Yukl et al., 1996). Leadership uses influence tactics to enable the relationship between employee internal agreement and intrinsic motivation (Yukl, 2002). Leadership's use of hard influence tactics and soft influence tactics changes the perceived work environment for employees (Douglas, 2002, 2006), which enables or prevents internal agreement and task commitment (Yukl, 2002).

This research evaluates leadership influence tactics as a mediator for the relationship between SDT and employee affective commitment to the SDWT transition. Task commitment toward a SDWT transition is more likely when leadership uses soft influence tactics and refrains from using hard influence tactics (Douglas, 2002; Yukl et al., 1996). When implementing a SDWT structure, a leader's ability to influence employees with soft influence is important as it creates a work environment that is conducive to commitment (Douglas & Gardner, 2004).

### **IV.3 Hypotheses: Influence Tactics Mediate the SDT Relationship with Affective Commitment**

This research posits that leadership's use of hard influence tactics create a work environment that prevents employees to relate the constructs of SDT and affective commitment to a SDWT transition. Additionally this research posits that leadership's use of soft influence tactics create a work environment that enables employees to relate the constructs of SDT and

affective commitment to a SDWT transition. This research tests leadership's use of hard influence tactics and soft influence tactics as they mediate the SDT to commitment relationship for direct labor employees such that ...

H2a – Soft influence interactions between leader and employee mediate the relationship between autonomy and affective commitment to a SDWT transition, where the relationship becomes more positive.

H2b – Hard influence interactions between leader and employee mediate the relationship between autonomy and affective commitment to a SDWT transition, where the relationship becomes less positive.

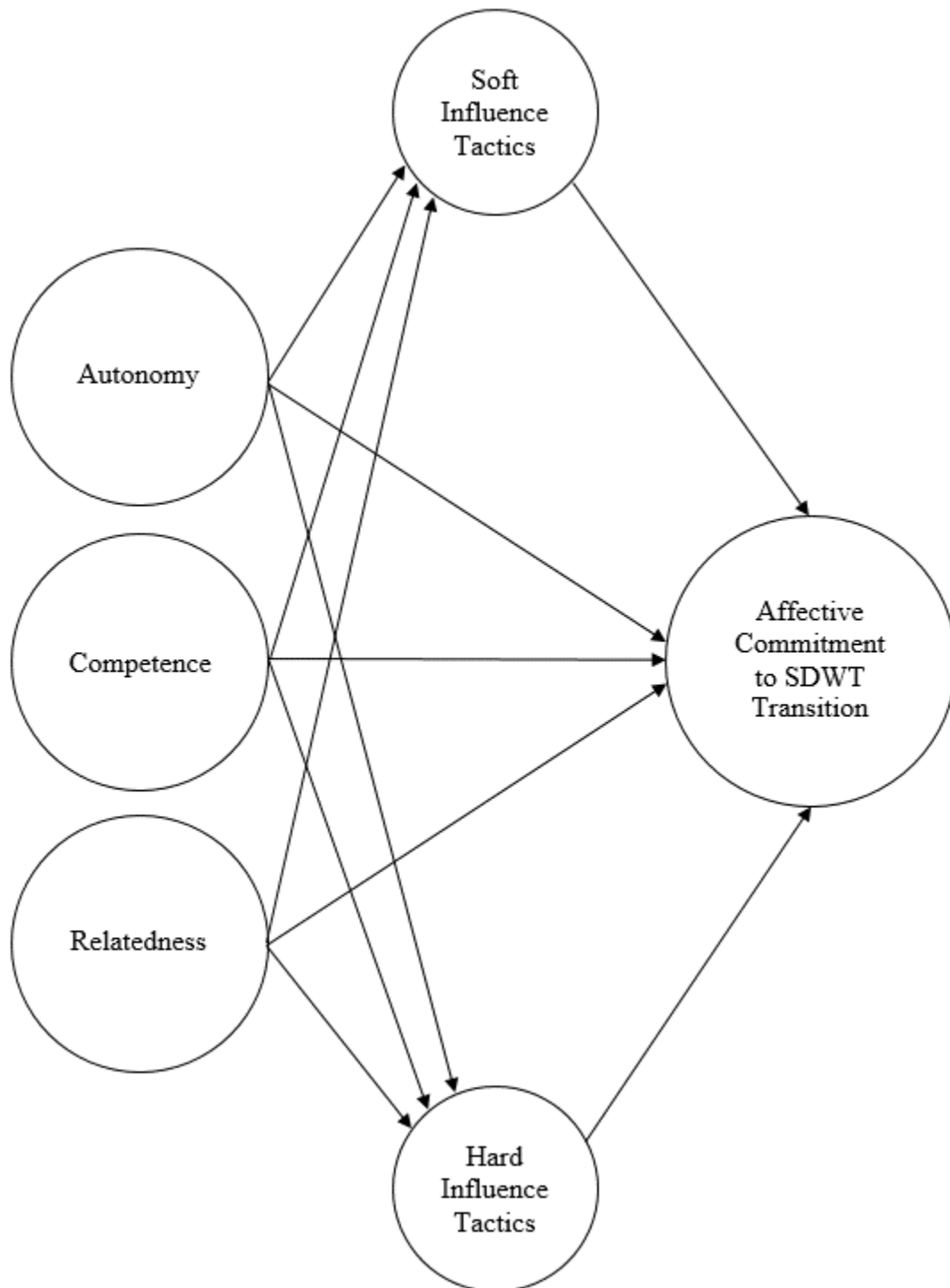
H2c – Soft influence interactions between leader and employee mediate the relationship between competence and affective commitment to a SDWT transition, where the relationship becomes more positive.

H2d – Hard influence interactions between leader and employee mediate the relationship between competence and affective commitment to a SDWT transition, where the relationship becomes less positive.

H2e – Soft influence interactions between leader and employee mediate the relationship between relatedness and affective commitment to a SDWT transition, where the relationship becomes more positive.

H2f – Hard influence interactions between leader and employee mediate the relationship between relatedness and affective commitment to a SDWT transition, where the relationship becomes less positive.



**Figure 3 Mediating Model**

## V CHAPTER 5: METHODS

### V.1 Research Design

The intent of this research study is twofold. First, the intent is to identify the effects of SDT on employee commitment during a SDWT transition. Second, the intent is to evaluate if leadership influence tactics mediate the relationship between SDT and affective commitment. The research investigator has a unique opportunity to evaluate employee perceptions of SDT and leadership influence tactics as a specific direct labor work force proceeds through a SDWT transition. Qualitative research has many benefits. However, qualitative research is normally used in grounded research where findings are discovered throughout the research instead of hypothesized from the beginning (Strauss & Corbin, 1990). This research establishes hypotheses at the onset and utilizes surveys to support research hypotheses. Quantitative analysis is a good fit for survey research when observing organizational behavior in a natural setting (Yin, 2013).

This research study engages direct labor employees and front line supervision. This research explores adoption of an organizational change from the employee perspective. The unit of analysis in this study is the direct labor employees that are transitioning to a SDWT structure. The research focus is to evaluate the employee's perceptions of autonomy, competence, relatedness, soft influence tactics and hard influence tactics as they relate to affective commitment to a SDWT transition.

In this research study, 90 direct labor employees are transitioning to a SDWT structure. The 90 direct labor employees are the "test group". The test group represents a population of direct labor employees perceiving increasing job sovereignty. The test group is composed of direct labor employees that have variation in age, gender, and years of service. The demographic variables of age, gender, and years of service are commonly used control variables in studies that

evaluate the effects of leadership influence on organizational changes (Douglas & Gardner, 2004). The test group is operationally divided into ten unique SDWTs in the manufacturing operation. The manufacturing operation is a Tier-1 supplier of power generation products to companies such as GE, Siemens, and Mitsubishi. This manufacturing operation is part of a much larger enterprise of businesses in under one corporation. The corporation is using this manufacturing operation as a pilot for SDWT work environments.

The business leaders of the transitioning organization want to learn information about this SDWT pilot for future enterprise-wide SDWT transitions. The human resource business leaders prepared the employees in advance of the SDWT transition with six modules of soft skills training. The six modules of soft skills training were (1) team organization, (2) DISC personality evaluation, (3) adjusting to change, (4) communication, (5) candor with care, and (6) decision making. Additionally, two training modules were conducted during the SDWT transition. The two additional training modules were (1) conflict resolution and (2) measures of success. Employee feedback was collected at each soft skills training module and intermittently throughout the transition. The business leaders collected employee feedback to help future SDWT transitions in their company. The employee feedback was anonymous. The human resource business leaders applied unique identification numbers to the research surveys which were anonymous to the research investigator. The unique identification numbers allow the research investigator to compare changes in employee perception at the employee level.

This research used the ongoing schedule of employee feedback sessions to administer a hardcopy survey. The hardcopy survey provided the most control over the test group. Access to the test group provided an opportunity for multiple waves of survey data. The multiple waves of data and unique identification numbers allowed this research to evaluate changes in employee

perception of autonomy, competence, relatedness, soft influence tactics, hard influence tactics, and affective commitment. The survey questions are directed to employee perceptions of affective commitment to a SDWT transition, employee perceptions of self-determination and the impact of leadership influence tactics.

## **V.2 Survey Instrument**

This research uses existing quantitative instruments in developing a multi-faceted instrument measuring the three elements of SDT (autonomy, competence, relatedness), hard influence tactics, soft influence tactics, and affective commitment. Using tested instruments improves the reliability in the latent constructs and provides a benchmark for future research studies (Straub, 1989). In some cases, the affective commitment instrument (Meyer & Allen, 2004) was modified to reflect specific references to the SDWT transition.

Affective commitment to the SDWT transition is the construct of interest for the organization and the dependent variable in this research study. Affective commitment to the SDWT transition is measured by the TCM (Meyer & Allen, 2004) for employee commitment. As stated in chapter II, affective commitment is associated with organizational goals (Meyer & Allen, 1991, 2004; Meyer et al., 2004). This research focuses on the affective commitment portion of the TCM. The TCM for affective commitment is a 6-item, 7-point Likert scale questionnaire measuring employees' perceptions of affective commitment to the SDWT transition.

The components of SDT are autonomy, competence, and relatedness (Broeck et al., 2010; Deci & Ryan, 1985). This research posits that autonomy, competence, and relatedness have positive relationships with affective commitment to a SDWT transition. Autonomy, competence, and relatedness are measured by the Basic Needs Satisfaction at Work Scale (Broeck et al.,

2010). The survey questions in the Basic Needs Satisfaction at Work Scale did not need to be modified from their published condition. The Basic Needs Satisfaction at Work Scale is a 22-item, 7-point Likert scale to measure employee perceptions of autonomy, competence, and relatedness at work.

The business leaders in the transitioning organization are interested in leadership involvement that promotes and mitigates employee desires to transition to a more autonomous working structure. This research is interested in the extrinsic influence that leadership imposes upon employees that impacts the employees' affective commitment to a SDWT transition. Hard influence tactics and soft influence tactics are measured by the Influence Behavior Questionnaire (Yukl et al., 2008). The Influence Behavior Questionnaire measures employees' perceptions of leadership influence tactics that are imposed during the SDWT transition. The survey questions in the Influence Behavior Questionnaire did not need to be modified from their published condition. The Influence Behavior Questionnaire is a 24-item, 5-point Likert scale survey that measures leadership's use of hard influence tactics and soft influence tactics.

This research study evaluates two survey waves. Both survey waves used the same multi-faceted survey instrument. Survey wave 1 was administered when the ten SDWTs were first formed which was during the first week of September 2016. Survey wave 1 data provided a baseline for employee perceptions of affective commitment, autonomy, competence, relatedness, hard influence tactics, and soft influence tactics. Survey wave 1 data provided an opportunity to evaluate the strength of the base research model where autonomy, competence, and relatedness are hypothesized to have a positive relationship with affective commitment to a SDWT transition. Survey wave 2 was administered three months after the formation of the 10 SDWTs which was during the first week of December 2016. Survey wave 2 data provided all the same

benefits of survey wave 1, where the strength of the base research model was evaluated. Using survey wave 1 and survey wave 2, the research investigator calculated shifts in employee perceptions in affective commitment, autonomy, competence, relatedness, hard influence tactics and soft influence tactics.

### **V.3 Data Collection**

The human resources business leaders administered all hard copy surveys and coded each employee to a unique identification number. These business leaders ensured that every employee completed the hard copy survey in survey wave 1 and survey wave 2. Due to this intervention, the response rate was a perfect 100% for both survey wave 1 and survey wave 2. Absent employees on the day of the survey were required to take the survey upon returning to work. Survey wave 1 recorded five employees that required a survey make-up upon returning to work. Survey wave 2 recorded three employees that required a survey make-up upon returning to work. Sixteen contract laborers were hired during the period between survey wave 1 and survey wave 2. The sixteen contract laborers were administered survey wave 2 with their new teams but their data was not included in the evaluations. There was no post-hoc analyses with the 16 contract laborers, but received all of the same training as the test group population.

The organization is a manufacturing company with different locations. The pilot study is based in a manufacturing operation in the southeast. The test group population is spread across a three shift manufacturing operation scheduled from Monday through Friday. The sample characteristics for the 90 employees that participated in survey wave 1 and survey wave 2 are shown in Table 2 – Sample Characteristics.

Table 2 Sample Characteristics

<b>TABLE 2</b>			
<b>Sample Characteristics</b>			
		<u>N</u>	<u>Percent</u>
<b>Work Type</b>			
Assembly		40	44.4%
Welding		25	27.8%
Machining		11	12.2%
Material Handling		9	10.0%
Supervision		5	5.6%
Total:		90	
<b>Shift</b>			
First Shift		44	48.9%
Second Shift		33	36.7%
Third Shift		13	14.4%
Total:		90	
<b>Age Group</b>			
18 to 27 years		16	17.8%
28 to 37 years		22	24.4%
38 to 47 years		19	21.1%
48 to 57 years		26	28.9%
58 or older		7	7.8%
Total:		90	
<b>Gender</b>			
Male		62	26.4%
Female		28	58.5%
Total:		90	
<b>Length of Service</b>			
0 to 5 years		55	61.1%
6 to 10 years		11	12.2%
11 to 15 years		4	4.4%
16 to 20 years		19	21.1%
21 to 25 years		0	0.0%
26 to 30 years		1	1.1%
31 to 35 years		0	0.0%
36 to 40 years		0	0.0%
Total:		90	

## VI CHAPTER 6: RESULTS

### VI.1 Data Analysis

The first part of the results section analyzes the control variables, independent variables, and dependent variable for both wave 1 and wave 2. Wave 1 provides a data baseline or starting point. Wave 2 provides insight on the effects of SDWTs being introduced. The means and standard deviations of each variable indicates current state perceptions of autonomy, competence, and relatedness. The current state data provides insight on the potential variation up and down for this specific population. The second part evaluates the strength of the base research model in Figure 2 for both survey wave 1 and survey wave 2. The data analysis on the hypotheses previously listed where the components of SDT are positively related to employee affective commitment to a SDWT transition. The intent of the base research model is to research the direct effects between SDT and affective commitment to a SDWT. The direct effects explain variation in employee affective commitment to a SDWT transition. The third part evaluates significant changes between survey wave 1 and survey wave 2. This research study is a unique look at a direct labor target group of employees. This study evaluates real-time perceptions of direct labor employees during a SDWT transition. Constructs that have significant changes in means provide useful insights to what is happening during a SDWT transition. The aforementioned analyses in the second and third parts are based upon multiple regression and simple comparisons of means. The fourth part introduces leadership influence tactics through the application of partial least squares structural equation modeling (PLS-SEM) (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014). The PLS-SEM offers a path analysis that introduces hard influence tactics and soft influence tactics as mediators to the relationships between SDT and affective commitment.



## VI.2 Variable Analysis

Employee affective commitment to the SDWT transition is the focus of this research and the dependent variable in this data analysis. As stated in chapter V, affective commitment is measured by the TCM. Five reflective survey questions from the TCM represent affective commitment to the transition to a SDWT structure. Survey wave 1 and survey wave 2 data is shown in Appendix C (Table – Appendix C – 01). Affective commitment has acceptable reliability levels (wave 1:  $\alpha = .84$  and wave 2:  $\alpha = .89$ ) in both survey wave 1 and survey wave 2.

The fully expanded research model posits that SDT and influence tactics are significant to explain variation in employee commitment to a SDWT transition. Autonomy, competence, and relatedness are base constructs and hard influence tactics and soft influence tactics mediate the base model. Recent research that uses quantitative methods to explain variation in organizational commitment use age, gender, and years of service as control variables (Douglas & Gardner, 2004). Age, gender, and years of service were included within the survey to evaluate potential significance of these demographics in explaining variation in employee affective commitment to a SDWT transition. The fully expanded model with control variables is shown in Figure 4.

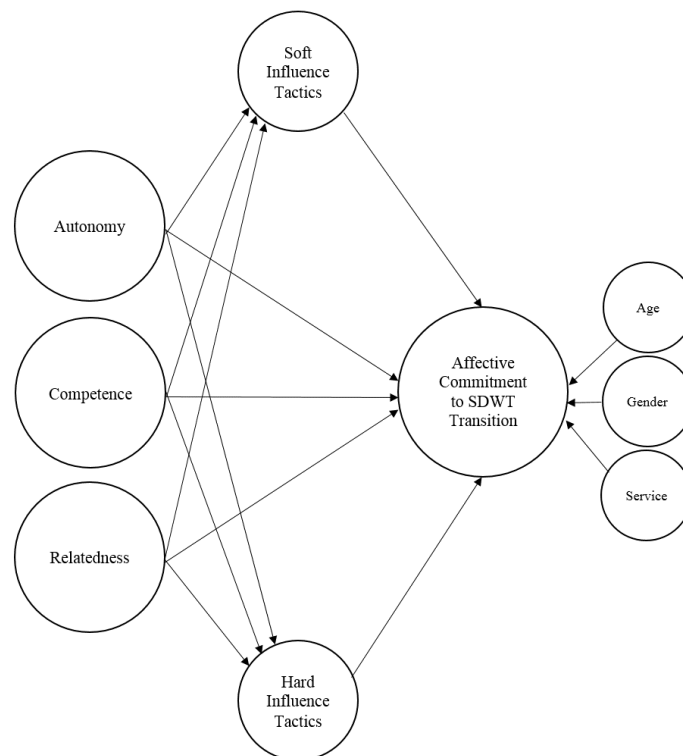
The means and standard deviations of the variables in both wave 1 and wave 2 provides insight on the potential construct variation, which is shown in Table 3 – Means and Standard Deviations. The dependent variable, affective commitment, has a mean score of 5.05 and 5.27 on a 7-point scale with a standard deviation of 1.19 and 1.33 respectively to wave 1 and wave 2. This shows the target population is in the upper third of the range for affective commitment to a SDWT transition for both wave 1 and wave 2 and maintains greater than one sigma away from the maximum score on the 7-point scale. Autonomy has a mean score of 5.29 and 5.43 on a 7-point scale with a standard deviation of 1.07 and 1.28 respectively to wave 1 and wave 2. This

shows the target population is in the upper third of the range for perceived autonomy for both wave 1 and wave 2 and maintains greater than one sigma away from the maximum score on the 7-point scale. Competence has a mean score of 6.03 and 6.11 on a 7-point scale with a standard deviation of .96 and 1.24 respectively to wave 1 and wave 2. This shows the target population is in the upper sixth of the range for perceived competence for both wave 1 and wave 2 and is less than one sigma away from the maximum score on the 7-point scale. The target population has a relatively high perception of competence. The wave 1 average perception of competence for this target population allows less than one point of variation up to the maximum scale value.

Relatedness has a mean score of 5.41 and 5.38 on a 7-point scale with a standard deviation of 1.21 and 1.27 respectively to wave 1 and wave 2. This shows the target population is in the upper third of the range for perceived relatedness for both wave 1 and wave 2 and maintains greater than one sigma away from the maximum score on the 7-point scale. Soft influence tactics has a mean score of 3.17 and 3.50 on a 5-point scale with a standard deviation of 0.86 and 0.91 respectively to wave 1 and wave 2. This shows the target population is in the upper half of the range for perceived soft influence tactics for both wave 1 and wave 2 and maintains greater than one sigma away from the maximum score on the 5-point scale. Hard influence tactics has a mean score of 1.97 and 2.03 on a 5-point scale with a standard deviation of 0.93 and 0.96 respectively to wave 1 and wave 2. This shows the target population is in the lower half of the range for perceived hard influence tactics for both wave 1 and wave 2 and maintains greater than two sigma away from the either the minimum or maximum score on the 5-point scale.

**Table 3 Means and Standard Deviations**

<b>Table 3</b>						
<b>Means and Standard Deviations by Wave within Scale Range</b>						
Variable	Wave	n	Mean	SD	Scale Min	Scale Max
Affective Commitment	1	90	5.05	1.19	1	7
	2	90	5.27	1.33	1	7
Autonomy	1	90	5.29	1.07	1	7
	2	90	5.43	1.28	1	7
Competence	1	90	6.03	0.96	1	7
	2	90	6.11	1.24	1	7
Relatedness	1	90	5.41	1.21	1	7
	2	90	5.38	1.27	1	7
Soft Influence Tactics	1	90	3.17	0.86	1	5
	2	90	3.50	0.91	1	5
Hard Influence Tactics	1	90	1.97	0.93	1	5
	2	90	2.03	0.96	1	5

**Figure 4 Fully Expanded Research Model**

In evaluating the latent variables it is necessary to complete a factor analysis of the independent variables for both survey wave 1 and survey wave 2. The factor analysis is shown in Table 4 – Factor Analysis (Wave 1) and Table 5 – Factor Analysis (Wave 2). The factor

analyses indicate acceptable discriminant validity among the constructs. Three reflective survey questions from the Basic Needs Satisfaction at Work Scale (Broeck et al., 2010) represent the autonomy construct in SDT for both survey wave 1 and survey wave 2. Autonomy exhibits acceptable reliability levels (wave 1:  $\alpha = .72$  and wave 2:  $\alpha = .72$ ). Three reflective survey questions from the Basic Needs Satisfaction at Work Scale (Broeck et al., 2010) represent the competence construct in SDT for both survey wave 1 and survey wave 2. Competence exhibits acceptable reliability levels (wave 1:  $\alpha = .71$  and wave 2:  $\alpha = .71$ ). Four reflective survey questions from the Basic Needs Satisfaction at Work Scale (Broeck et al., 2010) represent the relatedness construct in SDT for both survey wave 1 and survey wave 2. Relatedness exhibits acceptable reliability levels (wave 1:  $\alpha = .80$  and wave 2:  $\alpha = .80$ ). Twelve reflective survey questions from the Influence Behavior Questionnaire (Yukl et al., 2008) represent the soft influence construct for both survey wave 1 and survey wave 2. Soft influence exhibits acceptable reliability levels (wave 1:  $\alpha = .94$  and wave 2:  $\alpha = .94$ ). Three reflective survey questions from the Influence Behavior Questionnaire (Yukl et al., 2008) represent the hard influence construct for both survey wave 1 and survey wave 2. Hard influence exhibits acceptable reliability levels (wave 1:  $\alpha = .70$  and wave 2:  $\alpha = .75$ ).

**Table 4 Factor Analysis (Wave 1)**

TABLE 4 Discriminant Validity - Wave 1 Self Determination Theory Constructs Extended With Influence Tactics					
	Autonomy	Competence	Relatedness	Soft Influence Tactics	Hard Influence Tactics
I feel free to express my ideas and opinions in this job	0.81				
I feel like I can be myself at my job	0.79				
The tasks I have to do at work are in line with what I really want to do	0.68				
I really master my tasks at my job		0.76			
I am good at the things I do in my job		0.87			
I have the feeling that I can even accomplish the most difficult tasks at work		0.68			
I do not really feel connected with other people at my job (Rev)			0.68		
At work, I feel part of a group			0.54		
I often feel alone when I am with my colleagues (Rev)			0.83		
At work, no one cares about me (Rev)			0.65		
My Supervisor ...					
Uses facts and logic to make a persuasive case for a request or proposal				0.75	
Explains clearly why a request or proposed change is necessary				0.67	
Explains why a proposed project or change would be practical and cost effective				0.73	
Provides information or evidence to show that a proposed activity or change is likely to be successful				0.79	
Says a proposed activity or change is an opportunity to do something really exciting and worthwhile				0.77	
Describes a clear, inspiring vision of what a proposed project or change could accomplish				0.87	
Talks about ideals and values when proposing a new activity or change				0.90	
Makes an inspiring speech or presentation to arouse enthusiasm for a proposed activity or change				0.79	
Explains that his/her request or proposal is consistent with official rules and policies				0.79	
Explains that a request or proposal is consistent with a prior agreement or contract				0.75	
Verifies that a request is legitimate by referring to a document such as a work order, policy manual, charter, bylaws, or formal contract				0.69	
Explains that a request or proposal is consistent with prior precedent and established practice				0.70	
Uses threats or warnings when trying to get you to do something					0.76
Uses threats or warnings when trying to get you to do something					0.75
Tries to pressure you to carry out a request					0.75
Cronbach's Alpha	0.72	0.71	0.80	0.94	0.70
Mean of Summated Scale	5.30	6.03	5.41	3.41	1.97
Scale Range	4.84 - 5.7	5.91 - 6.3	5.1 - 5.7	2.9 - 3.8	1.5 - 2.6
Reversed Survey Questions (Rev) have been inverted to positive direction.					
Rotation Method: Varimax with Kaiser Normalization					
Loadings <.40 suppressed					
Kaiser-Meyer-Olkin (KMO)= .84					
Bartlett's Test of Sphericity=1417.72, p < .001					

**Table 5 Factor Analysis (Wave 2)**

TABLE 5 Discriminant Validity - Wave 2 Self Determination Theory Constructs Extended With Influence Tactics					
	Autonomy	Competence	Relatedness	Soft Influence Tactics	Hard Influence Tactics
I feel free to express my ideas and opinions in this job	0.87				
I feel like I can be myself at my job	0.84				
The tasks I have to do at work are in line with what I really want to do	0.54				
I really master my tasks at my job		0.88			
I am good at the things I do in my job		0.91			
I have the feeling that I can even accomplish the most difficult tasks at work		0.83			
I do not really feel connected with other people at my job (Rev)			0.80		
At work, I feel part of a group			0.61		
I often feel alone when I am with my colleagues (Rev)			0.78		
At work, no one cares about me (Rev)			0.79		
My Supervisor ...					
Uses facts and logic to make a persuasive case for a request or proposal				0.75	
Explains clearly why a request or proposed change is necessary				0.71	
Explains why a proposed project or change would be practical and cost effective				0.83	
Provides information or evidence to show that a proposed activity or change is likely to be successful				0.79	
Says a proposed activity or change is an opportunity to do something really exciting and worthwhile				0.88	
Describes a clear, inspiring vision of what a proposed project or change could accomplish				0.79	
Talks about ideals and values when proposing a new activity or change				0.88	
Makes an inspiring speech or presentation to arouse enthusiasm for a proposed activity or change				0.79	
Explains that his/her request or proposal is consistent with official rules and policies				0.82	
Explains that a request or proposal is consistent with a prior agreement or contract				0.78	
Verifies that a request is legitimate by referring to a document such as a work order, policy manual, charter, bylaws, or formal contract				0.62	
Explains that a request or proposal is consistent with prior precedent and established practice				0.56	
Uses threats or warnings when trying to get you to do something					0.79
Uses threats or warnings when trying to get you to do something					0.80
Tries to pressure you to carry out a request					0.78
Cronbach's Alpha	0.72	0.71	0.80	0.94	0.75
Mean of Summated Scale	5.30	6.03	5.41	3.41	1.99
Scale Range	4.84 - 5.7	5.91 - 6.3	5.1 - 5.7	2.9 - 3.8	1.5 - 2.6
Reversed Survey Questions (Rev) have been inverted to positive direction.					
Rotation Method: Varimax with Kaiser Normalization					
Loadings <.40 suppressed					
Kaiser-Meyer-Olkin (KMO)= .84					
Bartlett's Test of Sphericity=1827.74, p < .001					

Correlations between variables provide insight on relationships. A correlation matrix evaluates significance and importance between dependent variable, control variables, and independent variables. The correlation matrix is shown in Table 6 – Descriptive Statistics and Correlations.

Age, gender, and years of service are commonly used control variables when evaluating commitment levels to organizational changes (Douglas & Gardner, 2004) shown in Table 6 – Descriptive Statistics and Correlations. Affective commitment is not significantly correlated with the control variables age (wave 1:  $r = .02$  and wave 2:  $r = .02$ ), gender (wave 1:  $r = -.01$  and wave 2:  $r = .03$ ), and years of service (wave 1:  $r = .04$  and wave 2:  $r = .03$ ). This data collection for both survey wave 1 and survey wave 2 indicates that the demographics of age, gender, and years of service are not significant in predicting variation in employee affective commitment to a SDWT transition.

The base research model and fully expanded research model are built on the hypotheses that the three components of SDT (autonomy, competence, relatedness) are positively related to employee affective commitment to a SDWT transition. Affective commitment is significantly correlated with autonomy (wave 1:  $r = .563$ ,  $p < .01$  and wave 2:  $r = .556$ ,  $p < .01$ ) shown in Table 6 – Descriptive Statistics and Correlations. Additionally, affective commitment is significantly correlated with relatedness (wave 1:  $r = .710$ ,  $p < .01$  and wave 2:  $r = .736$ ,  $p < .01$ ). However, affective commitment is not significantly correlated with competence (wave 1:  $r = .16$  and wave 2:  $r = .199$ ).

The fully expanded research model evaluates the mediated effects of leadership influence tactics on the relationship between SDT and employee commitment. Affective commitment is significantly correlated with soft influence tactics (wave 1:  $r = .609$ ,  $p < .01$  and wave 2:  $r = .588$ ,

p < .01) shown in Table 6 – Descriptive Statistics and Correlations. Also, affective commitment is significantly correlated with a negative relationship to hard influence tactics (wave 1: r = -.185, p < .05 and wave 2: r = -.269, p < .01).

The correlation matrix output indicates that both the base research model and fully expanded research model have potential in predicting variation in employee commitment. Also, both survey wave 1 and survey wave 2 indicate that the control variables are not significant or influential in predicting variation in employee commitment.

**Table 6 Descriptive Statistics and Correlations**

		Table 6 Descriptive Statistics and Correlations for Measures																				
Measure	Wave 1	Mean	S.D.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	
1. Age Group (1)	2.80	1.24		1.00																		
2. Gender (2)	1.69	0.47		-.13	1.00																	
3. Years Of Service Group (3)	1.90	1.25		.476**	-.10	1.00																
4. Autonomy	5.29	1.07		-.02	-.01	0.15	1.00															
5. Competence	6.03	0.96		-.10	-.03	-.07	.292**	1.00														
6. Relatedness	5.41	1.20		-.175*	0.06	-.07	.572**	.192*	1.00													
7. Soft Influence Tactics	3.17	0.86		-.016	-.06	-.02	.362**	-.02	.535**	1.00												
8. Hard Influence Tactics	1.97	0.93		-.206*	-.273**	-.13	-.15	-.09	-.15	-.15	1.00											
9. Affective Commitment to SDWT Transition	5.05	1.19		0.02	-.01	0.04	.563**	0.16	.710**	.609**	-.185*	1.00										
Wave 2																						
1. Age Group (1)	2.84	1.24		.990**	-.12	.562**	0.01	-.09	-.176*	-.15	-.202*	0.03	1.00									
2. Gender (2)	1.69	0.46		-.12	1.000**	-.14	-.01	-.03	0.06	-.06	.273**	-.01	-.12	1.00								
3. Years Of Service Group (3)	1.90	1.30		.531**	-.14	.944**	0.10	-.11	-.15	-.01	-.11	0.02	.546**	-.14	1.00							
4. Autonomy	5.45	1.14		-.11	0.10	-.01	.534**	.295**	.435**	.414**	-.15	.475**	-.04	0.08	-.03	1.00						
5. Competence	6.14	1.17		-.13	0.12	-.13	.200*	.441**	0.08	0.13	-.13	0.09	-.16	0.09	-.10	.430**	1.00					
6. Relatedness	5.44	1.27		-.06	0.00	-.10	.376**	0.15	.680**	.534**	-.201*	.594**	-.09	0.02	-.15	.591**	.254**	1.00				
7. Soft Influence Tactics	3.41	0.93		0.02	-.15	0.01	.207*	-.07	.407**	.754**	-.244*	.457**	-.04	-.11	0.01	.424**	0.16	.449**	1.00			
8. Hard Influence Tactics	1.99	0.95		-.03	0.14	-.05	-.16	-.10	-.181*	-.217*	.630**	-.14	-.03	0.13	-.06	-.235**	-.12	-.266**	-.257**	1.00		
9. Affective Commitment to SDWT Transition	5.27	1.27		0.04	0.01	-.01	.248**	0.02	.521**	.569**	-.186*	.602**	0.02	0.03	-.08	.556**	.199*	.736**	.588**	-.269**	1.00	

\* Significant at the 0.05 level (one-tailed).  
 \*\* Significant at the 0.01 level (one-tailed).  
 (1) Age Group:  
 1 - 18 to 27 years  
 2 - 28 to 37 years  
 3 - 38 to 47 years  
 4 - 48 to 57 years  
 5 - 58 or older  
 (2) Gender:  
 1 - Male  
 2 - Female  
 (3) Years of Service Groups:  
 1 - 0 to 5 years  
 2 - 6 to 10 years  
 3 - 11 to 15 years  
 4 - 16 to 20 years  
 5 - 21 to 25 years  
 6 - 26 to 30 years  
 7 - 31 to 35 years  
 8 - 36 to 40 years

**VI.3 Base Model Evaluation**

The base research model in Figure 2 hypothesizes that there is a direct relationship between SDT and employee affective commitment to a SDWT transition. If supported, the base research model has value in providing independent variables with predictive attributes to employee variation in commitment to a SDWT transition. The control variables remain in the

model evaluation though Table 5 shows these control variables do not have significant relationships with the dependent variable. The multiple regression of the base research model is shown in Table 7 – Regression Analysis; Base Research Model.

**Table 7 Regression Analysis; Base Research Model**

<b>Table 7</b>						
<b>Test of Self Determination Theory predicting variation in Affective Commitment</b>						
Model	Dependent Variable	Independent Variable(s)	Standardized Coefficient	p-value	R <sup>2</sup>	VIF
Wave 1						
1	Affective Commitment				0.559***	
		Age	0.124	0.162		1.450
		Gender	-0.030	0.688		1.028
		Length Of Service	0.015	0.867		1.514
		Autonomy	0.211	0.028*		1.673
		Competence	-0.009	0.911		1.121
		Relatedness	0.616	0.000***		1.602
Wave 2						
1	Affective Commitment				0.548***	
		Age	0.092	0.234		1.329
		Gender	-0.007	0.916		1.042
		Length Of Service	0.005	0.949		1.340
		Autonomy	0.218	0.018*		1.835
		Competence	-0.035	0.644		1.261
		Relatedness	0.621	0.000***		1.587
		* p < .05				
		** p < .01				
		***p < .001				

The control variables (age, gender, length of service) are not significant and do not contribute to the base research model in survey wave 1 or survey wave 2 in explaining variation in employee affective commitment towards a SDWT transition. Also, the SDT measure of commitment is not significant and does not contribute to the base research model in survey wave 1 or survey wave 2 in explaining variation in employee affective commitment towards a SDWT transition. The base research model data for survey wave 1 and survey wave 2 does not support hypothesis H1b. There is not empirical evidence in this model to support that employees' perception of competence has a significant relationship with the employees' affective commitment to a SDWT transition. This finding on competence as it relates to affective



commitment was supported in both survey wave 1 and survey wave 2, but is contradictory to literature on SDT and organizational change (Deci & Ryan, 1985). The SDT measures of autonomy (wave 1:  $r = .211$ ,  $p < .05$  and wave 2:  $r = .218$ ,  $p < .05$ ) and relatedness (wave 1:  $r = .616$ ,  $p < .001$  and wave 2:  $r = .621$ ,  $p < .001$ ) are significant. The base research model data for survey wave 1 and survey wave 2 support H1a and H1c. This data provides empirical evidence that employees' perception of autonomy and relatedness have a significant positive relationship with employees' affective commitment to a SDWT transition.

Table 6 – Descriptive Statistics and Correlations show that the employee affective commitment from survey wave 1 is significantly correlated with employee affective commitment from survey wave 2 ( $r = .602$ ,  $p < .01$ ). The constructs must be isolated from the effects of an existing level of affective commitment in the test group to evaluate the strength of each construct in predicting variation in the dependent variable. A multiple regression of the base research model when controlling for the effects of affective commitment survey wave 1 with affective commitment survey wave 2 is required to fully evaluate the strength of the base research model, which is shown in Table 8 – Regression Analysis: Base Research Model, Control for Commitment Wave 1.

**Table 8 Regression Analysis: Base Research Model, Control for Commitment Wave 1**

Table 8						
Test of Self Determination Theory predicting variation in Affective Commitment in Wave 2 when controlling for Affective Commitment in Wave 1						
Model	Dependent Variable	Independent Variable(s)	Standardized Coefficient	p-value	R <sup>2</sup>	VIF
1	Wave 2 - Affective Commitment	Wave 1 - Affective Commitment	0.607	0.000***	0.361	1.000
2	Wave 2 - Affective Commitment	Wave 1 - Affective Commitment	0.210	0.020*	0.598	1.659
		Wave 2 - Age	0.075	0.363		1.443
		Wave 2 - Gender	0.011	0.870		1.039
		Wave 2 - Years of Service	-0.015	0.861		1.507
		Wave 2 - Autonomy	0.136	0.196		2.309
		Wave 2 - Competence	-0.005	0.946		1.345
		Wave 2 - Relatedness	0.552	0.000***		2.296
	* p < .05					
	** p < .01					
	***p < .001					

The evaluation of the base research model when controlling for the effects of employee affective commitment from survey wave 1 with employee affective commitment in survey wave 2 show that employee perceptions of relatedness remains significant ( $r = .552$ ,  $p < .001$ ), but employee perceptions of autonomy and competence are not significant. This data finding supports H1c, but rejects H1a and H1b. Overall, the base model finds that employee perceptions of relatedness is significant to explain variation in employee affective commitment to a SDWT transition when controlling for the effects of employee affective commitment between waves.

#### **VI.4 Comparison of Means – Wave 1 and Wave 2**

The comparison of variable means between survey wave 1 and survey wave 2 provides insights on what is changing throughout the SDWT transition. A paired sample T-test is used to identify where significant shifts in the means have occurred between survey wave 1 and survey wave 2. The paired sample T-tests are shown in Table 9 – Comparison of Means.

**Table 9 Comparison of Means**

Table 9						
Results Comparing Wave 1 and Wave 2 on Affective Commitment to a SDWT Transition						
Wave	n	Mean	SD	t	sig.	Decision
1	90	5.05	1.19	1.85	0.068	Reject Null
2	90	5.27	1.33			
Results Comparing Wave 1 and Wave 2 on Autonomy						
Wave	n	Mean	SD	t	sig.	Decision
1	90	5.29	1.07	1.13	0.261	Cannot Reject Null
2	90	5.43	1.28			
Results Comparing Wave 1 and Wave 2 on Competence						
Wave	n	Mean	SD	t	sig.	Decision
1	90	6.03	0.96	0.62	0.535	Cannot Reject Null
2	90	6.11	1.24			
Results Comparing Wave 1 and Wave 2 on Relatedness						
Wave	n	Mean	SD	t	sig.	Decision
1	90	5.41	1.21	0.29	0.771	Cannot Reject Null
2	90	5.38	1.27			
Results Comparing Wave 1 and Wave 2 on Soft Influence Tactics						
Wave	n	Mean	SD	t	sig.	Decision
1	90	3.17	0.86	5.03	.000	Reject Null
2	90	3.50	0.91			
Results Comparing Wave 1 and Wave 2 on Hard Influence Tactics						
Wave	n	Mean	SD	t	sig.	Decision
1	90	1.97	0.93	0.65	0.518	Cannot Reject Null
2	90	2.03	0.96			

The range of values between wave 1 and wave 2 increases for all independent and dependent variables. This indicates that the SDWT transition period impacts employees differently, where employees are changing their perceptions of autonomy, competence, relatedness, influence tactics, and affective commitment at different rates.

The dependent variable, employee affective commitment, makes a significant positive shift between survey wave 1 and survey wave 2 ( $p < .1$ ). The significant shift is not statistically strong, but even a weak change is important when considering the evaluation was over a three month period. This is an important finding considering that the focus of this research is to provide insight on how to effect employee affective commitment to a SDWT transition. Additionally, leadership soft influence tactics has a significant positive shift between survey wave 1 and survey wave 2 ( $p < .0001$ ). Autonomy, competence, relatedness, and hard influence

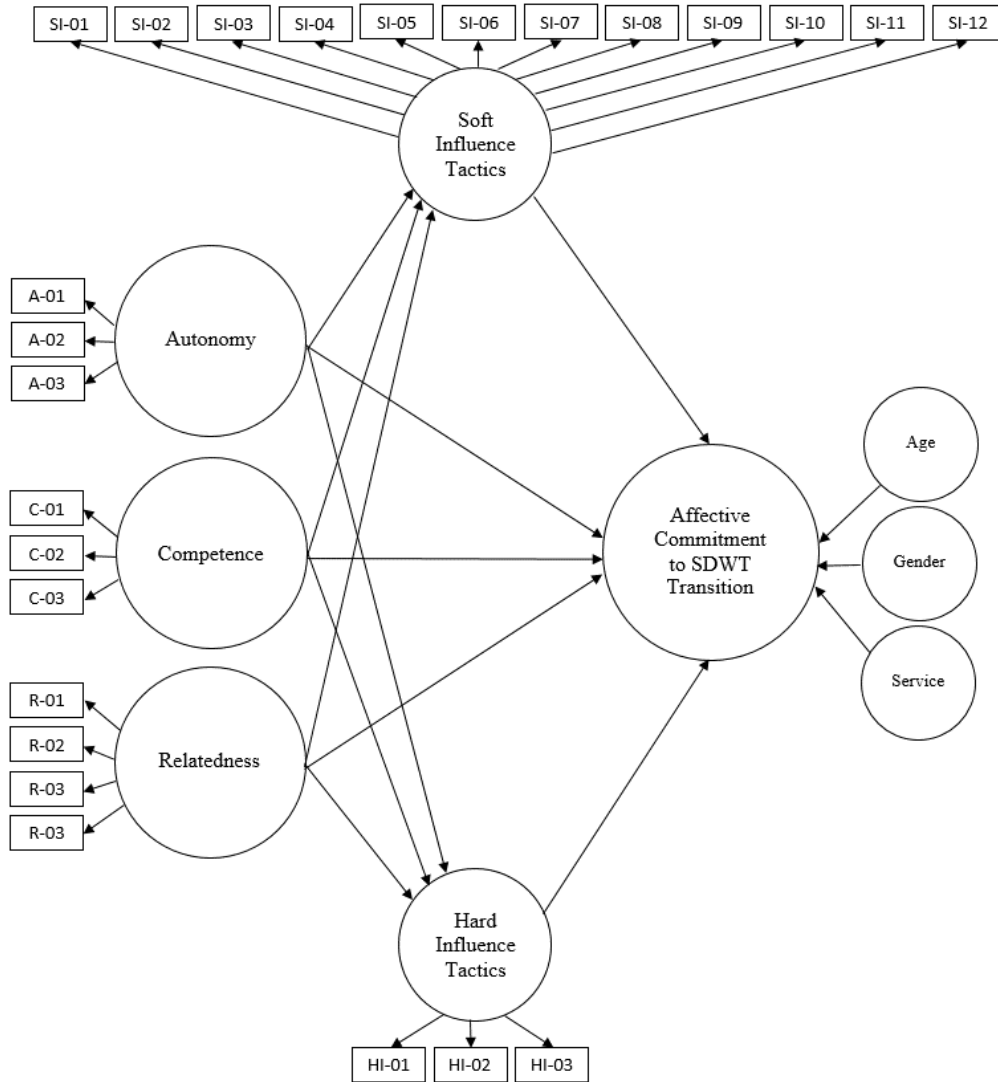
tactics do not make a significant shift between wave 1 and wave 2. Overall, the comparison of means identifies a positive change in both soft influence tactics and employee affective commitment between waves.

#### **VI.5 PLS-SEM Path Analysis – Mediated Research Model (Wave 2)**

The PLS-SEM provides insight on the mediating effects of hard influence tactics and soft influence tactics. PLS-SEM was chosen because of method's ability to test a complete theory (Rigdon, 1998). PLS-SEM provides a method to test the measurement of each latent variable, while addressing a test of relationships between the latent variables (Babin, Hair, & Boles, 2008). PLS-SEM is an appropriate test method for this research study because PLS-SEM is especially adapt with data sets that have normalized data and small sample sizes (Hair et al., 2014). The survey data shows that all control variables, independent variables, and dependent variable for both survey wave 1 and survey wave 2 have acceptable ranges for Skewness and Kurtosis. The control variables, independent variables, and dependent variable for wave 1 and wave 2 are considered normal data sets. As stated in chapter V, 90 employees completed both survey wave 1 and survey wave 2. This is a small sample size but large enough for PLS-SEM, considering the heuristics that a PLS-SEM sample size should be at least ten times the number of inner model paths for a construct in the model (Tompson, Barclay, & Higgins, 1995). This PLS-SEM evaluation has a sample size of 90 and 9 inner paths. As stated chapter V, the survey is a multi-faceted instrument composed of three well-established instruments TCM (Meyer & Allen, 2004), Basic Needs Satisfaction at Work Scale (Broeck et al., 2010) and Influence Behavior Questionnaire (Yukl et al., 2008). All survey questions from these instruments are reflective indicators to their specific construct of interest.

The structural model is analyzed in SmartPLS 2.0 M3 (Ringle, Wende, & Becker, 2015). Six constructs of affective commitment, autonomy, competence, relatedness, soft influence tactics and hard influence tactics are modeled with three control variables of age, gender, and years of service. The model is shown in Figure 5 – PLS SEM Reflective Model.

**Figure 5 PLS-SEM Reflective Model**



Reflective constructs are sometimes highly correlated with each other which impacts the model. Variance Inflation Factors (VIF) values less than 5 indicate the items in the reflective construct have acceptable levels of collinearity (Hair et al., 2014). The VIF collinearity evaluation is shown in Table 10 – SEM-PLS Collinearity.

**Table 10 SEM-PLS Collinearity**

<b>Table 10</b>	
<b>Structural Model Collinearity</b>	
<b>Wave 2</b>	
Predictor Latent Variables	Full Model Affective Commitment VIF
Age	1.329
Gender	1.105
Years of Service	1.343
Autonomy	1.944
Competence	1.264
Relatedness	1.738
Soft Influence Tactics	1.388
Hard Influence Tactics	1.149

The latent variables autonomy, competence, relatedness, soft influence tactics, and hard influence tactics have VIF measurements less than 5 showing that collinearity between indicators is not a problem.

The path coefficients represent the relationship between the structural model constructs. The significance of the model construct relationships are evaluated with a nonparametric bootstrapping procedure with 200 subsamples with a confidence interval set for a 1-tail test at 5% significance. The PLS-SEM results are shown in Table 11 – Structural Model Path Coefficients (Wave 2).

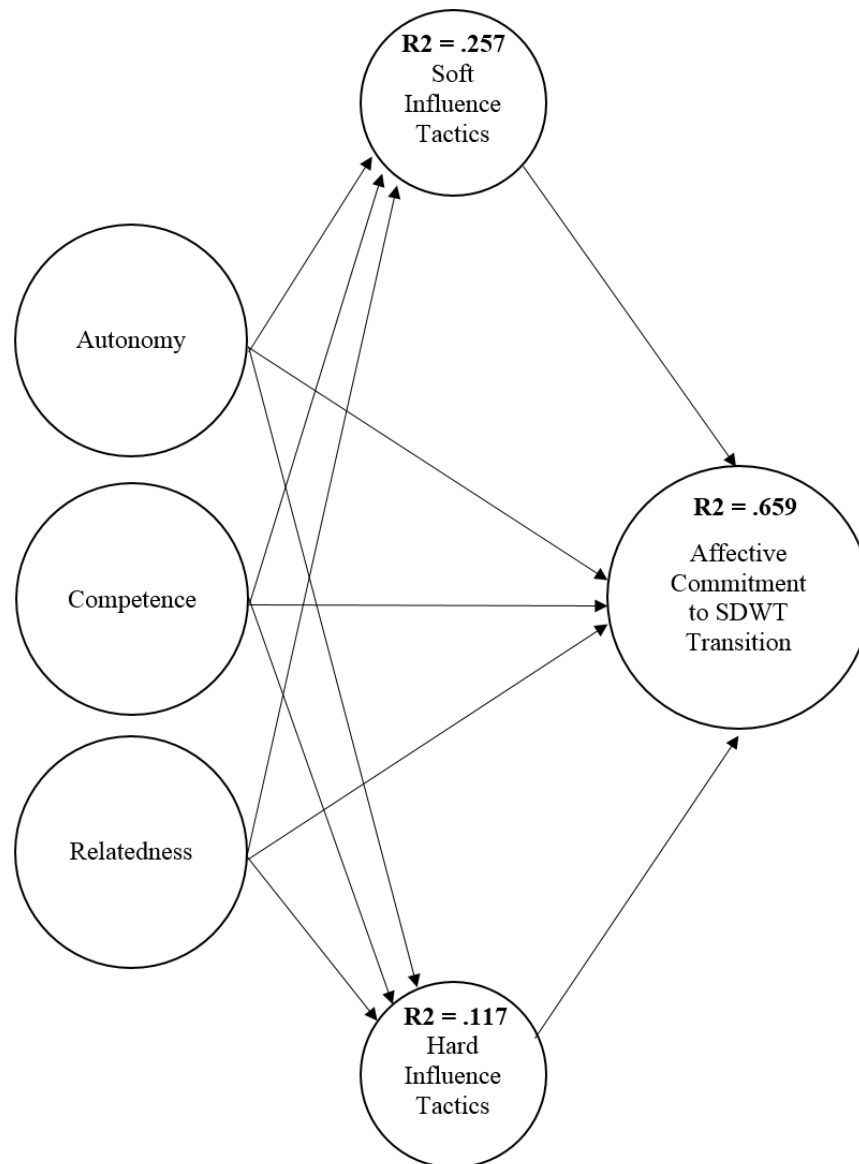
**Table 11 Structural Model Path Coefficients (Wave 2)**

<b>Table 11</b>					
<b>Model Estimation Results - Wave 2</b>					
	Path Coefficient	t-Value		Path Coefficient	t-Value
Age - Affective Commitment	0.087	1.322			
Gender - Affective Commitment	0.047	0.693			
Service Years - Affective Commitment	-0.073	1.829*			
Autonomy - Affective Commitment	0.145	1.382			
Autonomy - Soft Influence Tactics	0.285	3.024***	Soft Influence Tactics - Affective Commitment	0.296	4.122***
Autonomy - Hard Influence Tactics	-0.115	0.745	Hard Influence Tactics - Affective Commitment	-0.031	0.458
Competence - Affective Commitment	-0.013	0.143			
Competence - Soft Influence Tactics	-0.026	0.330	Soft Influence Tactics - Affective Commitment	0.296	4.122***
Competence - Hard Influence Tactics	-0.024	0.193	Hard Influence Tactics - Affective Commitment	-0.031	0.458
Relatedness - Affective Commitment	0.512	5.384***			
Relatedness - Soft Influence Tactics	0.290	2.559***	Soft Influence Tactics - Affective Commitment	0.296	4.122***
Relatedness - Hard Influence Tactics	-0.249	1.818*	Hard Influence Tactics - Affective Commitment	-0.031	0.458
* p < .1					
** p < .05					
*** p < .01					

Three paths in the fully expanded model are significant to the  $p < .01$  level. One of the three paths is a direct connection between a SDT component and employee affective commitment to a SDWT transition. Similar to the multiple regression analysis in the base model evaluation, only relatedness ( $p$ -score = .512,  $t$ -value = 5.384) is significant construct to positively predict variation in employee affective commitment during a SDWT transition. This finding confirms the multiple regression analysis. These evaluations agree to accept H1c and reject H1a and H1b. The other two significant paths indicated soft influence tactics as a mediator. The positive relationship between relatedness and affective commitment is partially mediated by soft influence tactics ( $p$ -score = .290  $\rightarrow$   $p$ -score = .296;  $t$ -value = 2.559  $\rightarrow$   $t$ -value = 4.122) such that the relationship becomes more positive. The non-significant relationship between autonomy and affective commitment is fully mediated by soft influence tactics ( $p$ -score = .285  $\rightarrow$   $p$ -score = .296;  $t$ -value = 3.024  $\rightarrow$   $t$ -value = 4.122) such that the non-significant relationship becomes a positive significant relationship.

The test group is fixed at  $N = 90$  employees in the population. PLS-SEM Reflective Model (Figure 5) has five latent variables with twenty-five observed variables. The coefficient of determination output is shown in Figure 5 – PLS Algorithm Output. The minimum sample size to detect effect is  $N = 15$ , considering the anticipated effect size of .659 at the probability level of .05. The test group size of  $N = 90$  exceeds the minimum sample size to detect effect.

**Figure 6 PLS Algorithm Output**



The effect size of each construct in SDT provides insight on magnitude of importance each construct. Table 12 – Effect Size Comparison evaluates the relative importance of autonomy, competence, and relatedness. An effect size less than .14 is small, between .15 and .24 is moderate, and greater than .35 is large. Autonomy ( $r^2 = .032$ ) and competence ( $r^2 = .006$ ) have small effect sizes on the model, while relatedness has a large effect size ( $r^2 = .416$ ).



**Table 12 Effect Size Comparison**

Table 12			
Effect Size Comparison			
SDT Construct	PLS-SEM Model - R-Square	R-Square Without Construct	Construct Effect Size
	0.659		
Autonomy		0.648	0.032
Competence		0.657	0.006
Relatedness		0.517	0.416

The PLS-SEM path analysis supports an earlier finding from the SPSS multiple regression analysis of the base research model, where relatedness is a significant positive predictor of variation in employee affective commitment to a SDWT transition. The findings from the multiple regression analysis and path analysis both support H1c as shown in Table 13. Additionally, the PLS-SEM path analysis findings support the SPSS multiple regression analysis findings in the base research model where autonomy and competence do not have significant relationship with employee affective commitment to a SDWT transition. These data findings from SPSS and PLS-SEM do not support H1a and H1b as shown in Table 13. The PLS-SEM path analysis supports hypothesis H2A where autonomy has a significant positive relationship with affective commitment when mediated by soft influence tactics. Additionally, the PLS-SEM path analysis supports hypothesis H2e where the relationship between relatedness and affective commitment to a SDWT transition is significant and becomes more positive when mediated by leadership's use of soft influence tactics. The PLS-SEM data does not support soft influence tactics as a mediator to the relationship between competence and employee affective commitment to a SDWT transition. This data finding does not support H2c. Leadership's use of hard influence tactics were found to be non-significant as a mediating effect between autonomy, competence, and relatedness with affective commitment to a SDWT transition. This finding

does not support hypotheses H2b, H2d, and H2f. A summary of all hypothesis testing results is shown in Table 13.

**Table 13 Hypothesis Testing Results**

TABLE 13		
Hypothesis Testing Results		
Model Analysis	Description	Outcome
Base Research Model	Description	
H1a	Autonomy > Affective Commitment	Reject
H1b	Competence > Affective Commitment	Reject
H1c	Relatedness > Affective Commitment	Supported
Mediated Research Model		
H2a	Autonomy > Soft Influence > Affective Commitment	Supported
H2b	Autonomy > Hard Influence > Affective Commitment	Reject
H2c	Competence > Soft Influence > Affective Commitment	Reject
H2d	Competence > Hard Influence > Affective Commitment	Reject
H2e	Relatedness > Soft Influence > Affective Commitment	Supported
H2f	Relatedness > Hard Influence > Affective Commitment	Reject

## VII CHAPTER 7: DISCUSSION

### VI.6 Summary: Research Application to Case:

SDT posits that employee perceived autonomy, competence, and relatedness has a positive relationship with employee commitment to an organizational change (Deci & Ryan, 1985; Deci, Vallerand, & Pelletier, 1991). SDT identifies antecedents to intrinsically motivated human behavior (Deci & Ryan, 1985), which are perceptions of autonomy, competence, and relatedness. Academia and practice desire to understand the antecedents of intrinsically motivated behavior because employees who are intrinsically motivated yield better results (Baard et al., 2004; Deci & Ryan, 1985). Instruments used to measure SDT are refined but have been developed from random populations (Broeck et al., 2010). SDT applies to this case as it predicts employee perceptions that are antecedents to commitment to a SDWT transition. However, SDT instruments have been developed on generalized populations, where this research focuses on a direct labor population.

LMX theory research evaluates the dyadic relationship between employee and leader (Dienesch & Liden, 1986; Henderson, Liden, Glibkowski, & Chaudhry, 2009). LMX research finds a positive relationship with SDT where a positive work environment mediates other employee to leader relationships (Geertshuis, Morrison, & Cooper-Thomas, 2015; Graves, 2013). The mediating effect of LMX applies to this case as it posits that employee to leader interactions mediate employee to leader relationships. LMX research does not provide details on the specific employee to leader interactions that nurture a positive work environment which mediates employee to leader relationships. Research on leadership influence tactics describes specific interactions between employee and leader that have positive and negative relationship

effects. Leadership influence tactics applies to this case as it describes the detailed interactions that mediate employee to leader relationships.

The base research model in Figure 2 and fully expanded research model in Figure 4 are developed via SDT and LMX literature. The model hypotheses are in agreement with SDT and LMX expectations. The application of theory is suitable for the research setting.

#### **VI.7 Summary: Case Application to Research:**

This research is unique as it focuses on the behavior of a direct labor population in light of SDT literature. This direct labor population is entering into a new work structure as it transitions to SDWTs. The business leaders in this organization provide a desirable work environment with wage and benefits that are in the top 20% in the work area. The employees in this company are not impacted by external organizations or union involvement. The morale in this company is average. These factors describe a work environment that is free of strong extrinsic forces that impact observed behavior. The current state of this direct labor population allows this research to generalize findings.

The data collected from this company challenges the expected results via SDT. The empirical data collected from this one observation implies a potential gap in literature.

Additional investigation into theory and instruments finds that SDT is generalized to human nature without considering potential social situations found in manufacturing environments that produce different behavioral responses. This research implies that humans working in a direct labor work environments will not behave as per expected in the light of SDT research.

Additionally, the quantitative analysis of the survey data provides a more granular explanation of the positive relationship between LMX and SDT. This research finds more specific leader actions that create a positive work environment which mediate employee to leader relationships.

The empirical data collected from this one organization transitioning to a SDWT environment provides lessons learned. Three contributions to literature are detailed that imply potential gaps and extend theory. Three implications to practice are discussed in light of current theory and practitioner practices.

The results of this company are discussed in three parts. The first part identifies three specific findings that add to the current literature on SDT and LMX. The evaluation of this direct labor population transitioning to a SDWT environment provides insights on behavior that differs from SDT literature and extends knowledge of the SDT to LMX relationship. The second part identifies limitations and opportunities for future research. The limitations are acknowledged but the fact that this data implies a behavioral shift from SDT literature is important. Qualitative responses from this direct labor work force indicates that the direct labor employees forego the satisfaction needs of competence and autonomy in place of leadership taking ownership of work related decisions. The third part identifies three implications helpful to practitioners. The implications for practice provides important lessons for SDWT transitions.

### **VI.8 Discussion Part 1; Contributions to Literature**

In this company there is evidence that SDT needs to be reconsidered as it pertains to a direct labor workforce. There may be specific factors in this one field observation that make it unique, but the data from this observation implies a potential gap in literature. This research implies that direct labor employee perceptions of competence is not a significant predictor of affective commitment to organizational changes. However, competence is a critical element of SDT in both seminal and current literature (Baard et al., 2004; Deci & Ryan, 1985). This research study is unique as the test population is composed of direct labor employees. Previous research on SDT is based in populations that are composed of students, researchers and

professional job descriptions (Baard et al., 2004; Broeck et al., 2010). The Basic Needs Satisfaction at Work Scale instrument (Broeck et al., 2010) was developed using a population of 120 undergraduate students, 560 working friends of undergraduate students, 194 university researchers, and 170 employees that work in HR placement services, and 261 call center agents. Missing from the Basic Needs Satisfaction at Work Scale instrument is a significant population of direct labor employees. This research implies that SDT theory has been inadequately generalized to human nature without considering the extrinsic factors found in manufacturing environments that modify the basic needs at work for employees. This implication from one observation is an important gap in literature as self-determination is an interesting and useful topic when evaluating direct labor employees.

The human resources business leaders asked qualitative questions to the direct labor employees to better understand employee perceptions. The employees were asked if the training on the SDWTs was important and improved their level of competence. One welding employee responded “You guys are paid the big bucks to make decisions. This is your call.” One machining employee responded “I did not need the training on teams. You know I can work with anyone.” A second machining employee said “The training was not needed. If you want us on teams, then put us on teams.” These quotes represent a commonly held belief in this direct labor workforce that leadership is responsible to make decisions for the direct labor workforce. In this company, these comments are an indication that the direct labor employees perceive a psychological contract (Rousseau, 1989) where leaders are responsible for making organizational decisions. In return, the direct labor employees forgo their satisfaction need for competence at work. The work environment reinforces this psychological contract due to direct labor employees being conditioned to work shift hours, follow work procedures, maintain specific

quality standards, and follow company policy. In this organization the direct labor work satisfaction need for competence is exchanged with leadership. The competence-accepting transition that direct labor employees make is an element of a culture shift. The culture shift is a difficult element of the SDWT transition.

There is evidence in this company that the direct labor employees' need for autonomy is significant to explain variation in employee affective commitment, but only if leadership interacts with soft influence tactics. Once again, this is a different finding in comparison to SDT literature (Baard et al., 2004; Deci & Ryan, 1985). The direct labor qualitative feedback indicates the direct labor employees are willing to sacrifice their need for competence and autonomy as part of their psychological contract (Rousseau, 1989) with leadership. However, the mediating influence of leadership using elements of soft influence tactics such as consultation, inspirational appeals, ingratiation, and rational persuasion (Yukl & Tracey, 1992) changes the direct labor employees' satisfaction needs to perceive autonomy as an important antecedent to affective commitment. The use of soft influence tactics is a more granular explanation of LMX as a mediator to SDT (Graves, 2013). Soft influence tactics are specific leader actions that improve the dyadic relationship between employee and leader which provides a positive work environment that enables other employee to leader relationships such as SDT to affective commitment. Leadership's use of soft influence tactics is perceived by employees as a sign that the psychological contract can be breached without leadership repercussions (Rousseau, 1989; Zhao, Wayne, Glibkowski, & Bravo, 2007). As one mechanical assembler stated "If you guys say it is okay to start calling the shots in my work area, then I guess it is worth a try." The leadership's use of soft influence tactics provides an opportunity for the direct labor employees to try working autonomously, which develops a desire to affectively commit to the SDWT

transition. This is an important aspect of the transition because affective commitment is critical to the success of the organizational change (Douglas, 2002; Foote & Li-Ping Tang, 2008; Kirkman & Rosen, 1999; Kirkman & Shapiro, 2001; Mowday et al., 2013). This research provides evidence that contributes to the literature on SDT as it is positively related to LMX theory (Graves, 2013). This evidence indicates that soft influence tactics are a more granular explanation of what is occurring between SDT and LMX. This is an important finding as it identifies a type of leadership inter-action with employees that can influence employees to modify their satisfaction needs at work where autonomy becomes a significant predictor of employee commitment.

Direct labor employees' need for relatedness is important to explain affective commitment to an organizational change. This finding agrees with literature on SDT (Baard et al., 2004; Deci & Ryan, 1985). Additionally, the positive relationship between relatedness and affective commitment is partially mediated by soft influence tactics. This provides additional evidence that soft influence tactics are a more granular explanation for a positive relationship between SDT and LMX (Graves, 2013). This finding points to relatedness as the one work satisfaction need of SDT in a direct labor work environment that individually explains variation in direct labor employee commitment to organizational changes.

## **VI.9 Discussion Part 2; Limitations and Opportunities for Future Research**

This quantitative research is based on a multi-faceted survey in one organization with two waves of data collection. The time period between waves was limited to three months due to time constraints. A three month period was sufficient to observe a change in employee affective commitment and soft influence tactics. These findings are important to the overall research study. However, additional waves of data with more samples and longer period time between



waves is an improvement. The additional waves with more samples is the foundation for a longitudinal study. A longitudinal study provides an opportunity to evaluate causality within the model. A longer period of time provides an opportunity to observe how soft influence tactics impact both autonomy and competence over a more significant time period.

The target population in this field observation perceives a high level of competency. Table 3 – Means and Standard Deviations shows that the target group started with a perceived competence positioned in the upper sextile of the range. Additionally, the average perception of competence is less than one sigma from the max value on a 7-point scale. This target population had minimal opportunity for upward variation in perceived competency. The absence of positive variation in perceived competence mitigates the opportunity to find a positive relationship between perceived competence and affective commitment to a SDWT transition. This issue will impact H1b and H2c as each of these hypotheses posit that increased levels of perceived competence will have a positive relationship with increased levels of employee affective commitment to a SDWT transition.

This research implies that direct labor employees display different work satisfaction needs as compared to SDT literature. This one field observations makes implications that direct labor employees in manufacturing environments mitigate some of their basic needs at work in exchange for leadership to take responsibility for organizational decisions. There are some mitigating factors in this one observation to conclusively identify a gap in SDT literature. However, the fact that this data does not follow SDT literature indicates that there may be interesting factors in a direct labor population that need to be better understood. Future research is needed to better understand this exchange of basic needs at work for responsibility avoidance. Two negative relationships are important to investigate (1) autonomy and high quality leader-

member exchange (Graves, 2013) and (2) competence and high quality leader-member exchange (Graves, 2013). The measurement of the dyadic relationship between employee and leader is evaluated as a high, medium, or low quality leader-member exchange. This leader-member exchange measurement can be evaluated as an employee perception or a leader perception. If autonomy and competence are negatively related to a leader perceived leader-member exchange, then this provides insight in a potential psychological contract between employee and leader.

### **VI.10 Discussion Part 3; Implications for Practice**

Practitioners gravitate to “employee training” as a natural first step when making organizational changes. The common thought in practice is that if employees have a high level of self-efficacy of the organizational change, then employees will naturally commit to making the change due to their self-efficacy to the topic. Stated specifically to this research findings, practitioners choose to increase employee SDWT competency to increase employee commitment to the future state organization structure, due to practitioner’s belief that employee self-efficacy on the topic will drive commitment. Unfortunately for practitioners, this research provides evidence that direct labor employees perception of competency on SDWTs does not related to their affective commitment to the change. During a SDWT transition, practitioners need to avoid a large amount of training expenses if the cause is to drive employee competency self-efficacy. These training expenses can be used elsewhere in the transition to better improve the likelihood of success.

Leadership’s use of soft influence tactics is under-utilized in traditional organizations (Douglas, 2002). The traditional organization structures are based upon command and control, where hard influence tactics are more common. However, this research provides evidence that soft influence tactics increase the positive relationship between autonomy and relatedness with

affective commitment to a SDWT transition. This research provides evidence that practitioners are wise to plan soft influence training sessions with the leadership that is about to undertake a SDWT transition. The manufacturing leaders need to adopt communication styles that use elements of consultation, inspirational appeals, ingratiation, and rational persuasion (Yukl & Tracey, 1992).

Leadership in direct labor work environments typically spend little time socializing strategic changes. Team building events are uncommon actions taken by practitioners when launching organizational changes with direct labor employees. However, this research provides strong evidence that direct labor employees desire feelings of relatedness before committing to organization changes. Leaders embarking into a SDWT transition need to plan actions that provide direct labor employees the opportunity to socialize, contribute, and connect as a team. Direct labor employees are looking for the acceptance of the proposed changes within the group as an antecedent for affective commitment. Practitioners must not overlook this important deliverable before launching the SDWTs into action. Direct labor employees must perceive acceptance of the SDWT idea among their peers before they fully commit as an individual.

## **VI.11 Conclusion**

This research makes implications that literature on SDT requires new thought with respect to a direct labor workforce. The relationship between direct labor and leadership has conditions that may mitigate some of the employees' basic needs at work. This finding is new to literature and important to practitioners due to the relationship between SDT and employee commitment. This is important because literature on organizational changes shows that employee commitment is instrumental to successfully accomplish organizational changes. This research identifies important findings for academics and practitioners as it clarifies the

relationships in a direct labor work environment that supports successful organizational structure changes. This research of one field observations opens up potential research on issues related to direct labor employees foregoing their work satisfaction need for autonomy and competence when transitioning to a new organization structure. Alternatively, direct labor employees require a perceived work satisfaction need of relatedness, which is significant to an employees' commitment to organizational changes. Leadership's use of soft influence tactics creates a work environment that allow direct labor employees to explore opportunities for autonomy and relatedness which increases the direct labor employees desire to commit to a SDWT transition.

## APPENDICES

### Appendix A: Wave 1 Survey

#### Woodward Greenville Self-Directed Work Teams Kick-Off Survey

Survey Number: \_\_\_\_\_

**(This number is used to connect this survey to the baseline completed previously. Your identity will remain anonymous.)**

#### SURVEY – PAGE 1 OF 9

The following questions concern your feelings about your job. Please indicate how much you agree with each of the following statements, by circling the number that best expresses your level of agreement/disagreement with each question. Remember that this is anonymous.

**1. I feel free to express my ideas and opinions in this job.**

1	-	2	-	3	-	4	-	5	-	6	-	7
Strongly		Moderately		Slightly		Neutral		Slightly		Moderately		Strongly
<----- Disagree ----->						<----- Agree ----->						

**2. I feel like I can be myself at my job.**

1	-	2	-	3	-	4	-	5	-	6	-	7
Strongly		Moderately		Slightly		Neutral		Slightly		Moderately		Strongly
<----- Disagree ----->						<----- Agree ----->						

**3. At work, I often feel like I have to follow other people's commands.**

1	-	2	-	3	-	4	-	5	-	6	-	7
Strongly		Moderately		Slightly		Neutral		Slightly		Moderately		Strongly
<----- Disagree ----->						<----- Agree ----->						

**4. If I could choose, I would do things at work differently at work.**

1	-	2	-	3	-	4	-	5	-	6	-	7
Strongly		Moderately		Slightly		Neutral		Slightly		Moderately		Strongly
<----- Disagree ----->						<----- Agree ----->						

**5. The tasks I have to do at work are in line with what I really want to do.**

1	-	2	-	3	-	4	-	5	-	6	-	7
Strongly		Moderately		Slightly		Neutral		Slightly		Moderately		Strongly
<----- Disagree ----->						<----- Agree ----->						

**6. I feel free to do my job the way I think it could be best done.**

1	-	2	-	3	-	4	-	5	-	6	-	7
Strongly		Moderately		Slightly		Neutral		Slightly		Moderately		Strongly
<----- Disagree ----->						<----- Agree ----->						

**SURVEY – PAGE 2 OF 9**

**7. In my job, I feel forced to do things I do not want to do.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**8. I do not really feel competent in my job.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**9. I really master my tasks at my job.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**10. I doubt whether I am able to execute my job properly.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**11. I am good at the things I do in my job.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**12. I have the feeling that I can even accomplish the most difficult tasks at work.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**13. I do not really feel connected with other people at my job.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**14. At work, I feel part of a group.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

## SURVEY – PAGE 3 OF 9

**15. I do not really mix with other people at my job.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**16. At work, I can talk with people about things that really matter to me.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**17. I often feel alone when I am with my colleagues.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**18. At work, people involve me in social activities.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**19. At work, there are people who really understand me.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**20. Some people I work with are close friends of mine.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**21. At work, no one cares about me.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**22. There is nobody I can share my thoughts with if I would want to do so.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

## SURVEY – PAGE 4 OF 9

**23. Based upon my experience with the implementation of Self Directed Work Teams, I would be very happy to spend the rest of my career with this organization.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**24. Based upon my experience with the implementation of Self Directed Work Teams, I really feel as if this organizations' problems are my own.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**25. Based upon my experience with the implementation of Self Directed Work Teams, I feel a strong sense of belonging to this organization.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**26. Based upon my experience with the implementation of Self Directed Work Teams, I do not feel "emotionally attached" to this organization.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**27. Based upon my experience with the implementation of Self Directed Work Teams, I do not feel like 'part of the family' at my organization.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**28. Based upon my experience with the implementation of Self Directed Work Teams, This organization has a great deal of personal meaning for me.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->



**SURVEY – PAGE 5 OF 9****Leadership Behavior:**

The purpose of this section is to learn more about the different ways supervisors influence others. Please circle the number that best describes your supervisor's behavior.

**My Supervisor:**

**29. Uses facts and logic to make a persuasive case for a request or proposal.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**30. Explains clearly why a request or proposed change is necessary.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**31. Explains why a proposed project or change would be practical and cost-effective.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**32. Provides information or evidence to show that a proposed activity or change is likely to be successful.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**33. Says a proposed activity or change is an opportunity to do something really exciting and worthwhile.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**34. Describes a clear, inspiring vision of what a proposed project or change could accomplish.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**SURVEY – PAGE 6 OF 9**

**My Supervisor:**

**35. Talks about ideals and values when proposing a new activity or change.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**36. Makes an inspiring speech or presentation to arouse enthusiasm for a proposed activity or change.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**37. Explains that his/her request or proposal is consistent with official rules and policies.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**38. Explains that a request or proposal is consistent with a prior agreement or contract.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**39. Verifies that a request is legitimate by referring to a document such as a work order, policy manual, charter, bylaws, or formal contract.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**40. Explains that a request or proposal is consistent with prior precedent and established practice.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**SURVEY – PAGE 7 OF 9**

**My Supervisor:**

**41. Demands that you carry out a request.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**42. Uses threats or warnings when trying to get you to do something.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**43. Repeatedly checks to see if you have carried out a request.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**44. Tries to pressure you to carry out a request.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**45. Asks you to suggest things you could do to help him/her achieve a task objective or resolve a problem.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**46. Consults with you to get your ideas about a proposed activity or change that he/she wants you to support or implement.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**47. Encourages you to express any concerns you may have about a proposed activity or change that he/she wants you to support or implement.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**SURVEY – PAGE 8 OF 9**

**My Supervisor:**

**48. Invites you to suggest ways to improve a preliminary plan or proposal that he/she wants you to support or help implement.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**49. Mentions the names of other people who endorse a proposal when asking you to support it.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**50. Gets others to explain to you why they support a proposed activity or change that he/she wants you to support or help implement.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**51. Brings someone along for support when meeting with you to make a request or proposal.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**52. Asks someone you respect to help influence you to carry out a request or support proposal.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**SURVEY – PAGE 9 OF 9**

Please circle the number that best describes you.

**53. What is your age?**

- a. 18 to 27 years
- b. 28 to 37 years
- c. 38 to 47 years
- d. 48 to 57 years
- e. 58 or older

**54. What is your gender?**

- a. Female
- b. Male

**55. What is your length of service with the company?**

- a. 0 to 5 years
- b. 6 to 10 years
- c. 11 to 15 years
- d. 16 to 20 years
- e. 21 to 25 years
- f. 26 to 30 years
- g. 31 to 35 years
- h. 36 to 40 years

**56. On the following continuum, please circle the number that best fits your supervisor.**

1	-	2	-	3	-	4	-	5	-	6	-	7
Pressures				Neutral				Inspires				
You To Work								You To Work				

**57. On the following continuum, please circle the number that best fits your supervisor.**

1	-	2	-	3	-	4	-	5	-	6	-	7
Consults				Neutral				Directs				
With You								The Work				
About Work								Given To You				

**58. On the following continuum, please circle the number that best fits your supervisor.**

1	-	2	-	3	-	4	-	5	-	6	-	7
Aligns With				Neutral				Discusses With				
Others To Define								You To Understand				
Your Work Issues								Your Work Issues				

## Appendix B: Wave 2 Survey

### Follow-Up Survey Woodward Greenville Self-Directed Work Teams Follow-Up Survey

Survey Number: \_\_\_\_\_

(This number is used to connect this survey to the baseline completed previously. Your identity will remain anonymous.)

#### SURVEY – PAGE 1 OF 9

The following questions concern your feelings about your job. Please indicate how much you agree with each of the following statements, by circling the number that best expresses your level of agreement/disagreement with each question. Remember that this is anonymous.

**1. I feel free to express my ideas and opinions in this job.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
<----- Disagree -----> <----- Agree ----->

**2. I feel like I can be myself at my job.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
<----- Disagree -----> <----- Agree ----->

**3. At work, I often feel like I have to follow other people's commands.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
<----- Disagree -----> <----- Agree ----->

**4. If I could choose, I would do things at work differently at work.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
<----- Disagree -----> <----- Agree ----->

**5. The tasks I have to do at work are in line with what I really want to do.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
<----- Disagree -----> <----- Agree ----->

**6. I feel free to do my job the way I think it could be best done.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
<----- Disagree -----> <----- Agree ----->

**SURVEY – PAGE 2 OF 9**

**7. In my job, I feel forced to do things I do not want to do.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**8. I do not really feel competent in my job.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**9. I really master my tasks at my job.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**10. I doubt whether I am able to execute my job properly.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**11. I am good at the things I do in my job.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**12. I have the feeling that I can even accomplish the most difficult tasks at work.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**13. I do not really feel connected with other people at my job.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**14. At work, I feel part of a group.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

## SURVEY – PAGE 3 OF 9

**15. I do not really mix with other people at my job.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**16. At work, I can talk with people about things that really matter to me.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**17. I often feel alone when I am with my colleagues.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**18. At work, people involve me in social activities.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**19. At work, there are people who really understand me.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**20. Some people I work with are close friends of mine.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**21. At work, no one cares about me.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**22. There is nobody I can share my thoughts with if I would want to do so.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->



## SURVEY – PAGE 4 OF 9

**23. Based upon my experience with the implementation of Self Directed Work Teams, I would be very happy to spend the rest of my career with this organization.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**24. Based upon my experience with the implementation of Self Directed Work Teams, I really feel as if this organizations' problems are my own.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**25. Based upon my experience with the implementation of Self Directed Work Teams, I feel a strong sense of belonging to this organization.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**26. Based upon my experience with the implementation of Self Directed Work Teams, I do not feel "emotionally attached" to this organization.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**27. Based upon my experience with the implementation of Self Directed Work Teams, I do not feel like 'part of the family' at my organization.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**28. Based upon my experience with the implementation of Self Directed Work Teams, This organization has a great deal of personal meaning for me.**

1 - 2 - 3 - 4 - 5 - 6 - 7  
 Strongly Moderately Slightly Neutral Slightly Moderately Strongly  
 <----- Disagree -----> <----- Agree ----->

**SURVEY – PAGE 5 OF 9****Leadership Behavior:**

The purpose of this section is to learn more about the different ways supervisors influence others. Please circle the number that best describes your supervisor's behavior.

**My Supervisor:**

**29. Uses facts and logic to make a persuasive case for a request or proposal.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**30. Explains clearly why a request or proposed change is necessary.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**31. Explains why a proposed project or change would be practical and cost-effective.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**32. Provides information or evidence to show that a proposed activity or change is likely to be successful.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**33. Says a proposed activity or change is an opportunity to do something really exciting and worthwhile.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**34. Describes a clear, inspiring vision of what a proposed project or change could accomplish.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**SURVEY – PAGE 6 OF 9****My Supervisor:**

**35. Talks about ideals and values when proposing a new activity or change.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**36. Makes an inspiring speech or presentation to arouse enthusiasm for a proposed activity or change.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**37. Explains that his/her request or proposal is consistent with official rules and policies.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**38. Explains that a request or proposal is consistent with a prior agreement or contract.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**39. Verifies that a request is legitimate by referring to a document such as a work order, policy manual, charter, bylaws, or formal contract.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**40. Explains that a request or proposal is consistent with prior precedent and established practice.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**SURVEY – PAGE 7 OF 9**

**My Supervisor:**

**41. Demands that you carry out a request.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**42. Uses threats or warnings when trying to get you to do something.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**43. Repeatedly checks to see if you have carried out a request.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**44. Tries to pressure you to carry out a request.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**45. Asks you to suggest things you could do to help him/her achieve a task objective or resolve a problem.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**46. Consults with you to get your ideas about a proposed activity or change that he/she wants you to support or implement.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**47. Encourages you to express any concerns you may have about a proposed activity or change that he/she wants you to support or implement.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**SURVEY – PAGE 8 OF 9**

**My Supervisor:**

**48. Invites you to suggest ways to improve a preliminary plan or proposal that he/she wants you to support or help implement.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**49. Mentions the names of other people who endorse a proposal when asking you to support it.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**50. Gets others to explain to you why they support a proposed activity or change that he/she wants you to support or help implement.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**51. Brings someone along for support when meeting with you to make a request or proposal.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**52. Asks someone you respect to help influence you to carry out a request or support proposal.**

1	2	3	4	5
Never	Seldom	Occasionally	Moderately	Often

**SURVEY – PAGE 9 OF 9**

Please circle the number that best describes you.

**53. What is your age?**

- a. 18 to 27 years
- b. 28 to 37 years
- c. 38 to 47 years
- d. 48 to 57 years
- e. 58 or older

**54. What is your gender?**

- a. Female
- b. Male

**55. What is your length of service with the company?**

- a. 0 to 5 years
- b. 6 to 10 years
- c. 11 to 15 years
- d. 16 to 20 years
- e. 21 to 25 years
- f. 26 to 30 years
- g. 31 to 35 years
- h. 36 to 40 years

**56. On the following continuum, please circle the number that best fits your supervisor.**

1	-	2	-	3	-	4	-	5	-	6	-	7
Pressures				Neutral				Inspires				
You To Work								You To Work				

**57. On the following continuum, please circle the number that best fits your supervisor.**

1	-	2	-	3	-	4	-	5	-	6	-	7
Consults				Neutral				Directs				
With You								The Work				
About Work								Given To You				

**58. On the following continuum, please circle the number that best fits your supervisor.**

1	-	2	-	3	-	4	-	5	-	6	-	7
Aligns With				Neutral				Discusses With				
Others To Define								You To Understand				
Your Work Issues								Your Work Issues				

## Appendix C: Data Tables

### Dependent variable evaluation

TABLE - Appendix C - 01		
Dependent Variable Analysis - Wave 1		
Formative Measures of Affective Commitment		
	Mean	SD
Based upon my experience with the implementation of Self Directed Work Teams, I would be very happy to spend the rest of my career with this organization	5.34	1.47
Based upon my experience with the implementation of Self Directed Work Teams, I feel a strong sense of belonging to this organization	4.97	1.58
Based upon my experience with the implementation of Self Directed Work Teams, I do not feel "emotionally attached" to this organization (Rev)	4.71	1.48
Based upon my experience with the implementation of Self Directed Work Teams, I do not feel like 'part of the family' at my organization (Rev)	5.78	1.55
Based upon my experience with the implementation of Self Directed Work Teams, This organization has a great deal of personal meaning for me	4.93	1.49
Cronbach's Alpha		
Mean of Summated Scale	5.05	
Standard Deviation of Summated Scale	1.19	
Dependent Variable Analysis - Wave 2		
Formative Measures of Affective Commitment		
	Mean	SD
Based upon my experience with the implementation of Self Directed Work Teams, I would be very happy to spend the rest of my career with this organization	5.62	1.46
Based upon my experience with the implementation of Self Directed Work Teams, I feel a strong sense of belonging to this organization	5.33	1.49
Based upon my experience with the implementation of Self Directed Work Teams, I do not feel "emotionally attached" to this organization (Rev)	4.82	1.57
Based upon my experience with the implementation of Self Directed Work Teams, I do not feel like 'part of the family' at my organization (Rev)	5.31	1.59
Based upon my experience with the implementation of Self Directed Work Teams, This organization has a great deal of personal meaning for me	5.28	1.44
Cronbach's Alpha		
Mean of Summated Scale	5.27	
Standard Deviation of Summated Scale	1.27	

## Appendix D: Acronym Key

<i>Topic</i>	<i>Acronym</i>
Self Directed Work Team	SDWT
Self-Managed Work Team	SMWT
Self-Determination Theory	SDT
Three-Component Model	TCM
Influence Behavior Questionnaire	IBQ
Leader Member Exchange Theory	LMX
Advanced Manufacturing Technology	AMT
Safety, Quality, Delivery, Responsiveness, Cost	SQDRC
First Pass Yield	FPY



## REFERENCES

- Adner, R., Csaszar, F. A., & Zemsky, P. B. (2014). Positioning on a multiattribute landscape. *Management Science*, *60*(11), 2794-2815.
- Allen, N. J., & Meyer, J. P. (1996). Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior*, *49*(3), 252-276. doi:10.1006/jvbe.1996.0043
- Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic Need Satisfaction: A Motivational Basis of Performance and Well-Being Two Work Settings. *Journal of Applied Social Psychology*, *34*(10), 2045-2068.
- Babin, B. J., Hair, J. F., & Boles, J. S. (2008). Publishing research in marketing journals using structural equation modeling. *Journal of Marketing Theory and Practice*, *16*(4), 279-286.
- Baiden, B., Price, A., & Dainty, A. (2003). EXPLORING THE USE OF TEAM TYPES FOR PERFORMANCE IMPROVEMENT. *Postgraduate Researchers*, *99*.
- Becker. (2012). Self-Directed Work Teams. *Pfeiffer*.
- Becker, T. E. (1992). FOCI AND BASES OF COMMITMENT: ARE THEY DISTINCTIONS WORTH MAKING? *Academy of management Journal*, *35*(1), 232.
- Behnke, L. S., Hamlin, R. M., & Smoak, B. C. (1993). The evolution of employee empowerment. *Semiconductor Manufacturing, IEEE Transactions on*, *6*(2), 143-155.
- Bishop, J. W., Scott, K. D., & Burroughs, S. M. (2000). Support, commitment, and employee outcomes in a team environment. *Journal of Management*, *26*(6), 1113-1132.
- Boyer, K. K., & Pagell, M. (2000). Measurement issues in empirical research: improving measures of operations strategy and advanced manufacturing technology. *Journal of operations management*, *18*(3), 361-374.

- Broeck, A., Vansteenkiste, M., Witte, H., Soenens, B., & Lens, W. (2010). Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the Work-related Basic Need Satisfaction scale. *Journal of Occupational and Organizational Psychology*, 83(4), 981-1002.
- Chen, I.-H., & Chung, A. (2014). Self-managers: Social contexts, personal traits, and organizational commitment. *Asia Pacific Journal of Management*, 31(2), 621-642.
- Christopher, M. (2000). The agile supply chain: competing in volatile markets. *Industrial marketing management*, 29(1), 37-44.
- Daft, R. L., & Lewin, A. Y. (1993). Where Are the Theories for the 'New' Organizational Forms? An Editorial Essay, i.
- Deci, & Ryan. (1985). *Intrinsic motivation and self-determination in human behavior*: New York : Plenum, c1985.
- Deci, & Ryan. (2000). The " what" and " why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological inquiry*, 11(4), 227-268.
- Deci, Ryan, Gagné, Leone, Usunov, & Kornazheva. (2001). Need satisfaction, motivation, and well-being in the work organizations of a former eastern bloc country: A cross-cultural study of self-determination. *Personality and Social Psychology Bulletin*, 27(8), 930-942.
- Deci, Vallerand, & Pelletier. (1991). Motivation and education: the self-determination perspective. *Educational psychologist*, 26, 325-346. doi:10.1207/s15326985ep2603&4\_6
- Deci, Vallerand, Pelletier, & Ryan. (1991). Motivation and education: The self-determination perspective. *Educational psychologist*, 26(3-4), 325-346.

- Dienesch, R. M., & Liden, R. C. (1986). Leader-Member Exchange Model of Leadership: A Critique and Further Development. *Academy of Management review*, *11*(3), 618-634.  
doi:10.5465/AMR.1986.4306242
- Dobni, C. B., Dobni, C. B., Klassen, M., Klassen, M., Sands, D., & Sands, D. (2016). Getting to clarity: new ways to think about strategy. *Journal of Business Strategy*, *37*(5), 12-21.
- Douglas. (2002). The effects of managerial influence behavior on the transition to self-directed work teams (SDWTs). *Journal of Managerial Psychology*, *17*(7), 628-635.  
doi:10.1108/026839402104444076
- Douglas. (2006). Communication in the Transition to Self-Directed Work Teams. *Journal of Business Communication*, *43*(4), 295-321. doi:10.1177/0021943606291704
- Douglas, & Gardner, W. L. (2004). Transition to self-directed work teams: implications of transition time and self-monitoring for managers' use of influence tactics. *Journal of Organizational Behavior*, *25*(1), 47-65. doi:10.1002/job.244
- Drucker, P. F. (1995). *The age of social transformation: Centre canadien de gestion.*
- Dwyer, W. (1995). *Team Building: Current Issues and New Alternatives: Reading, MA: Addison-Wesley.*
- Eccles, T. (1993). The deceptive allure of empowerment. *Long Range Planning*, *26*(6), 13-21.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative science quarterly*, *44*(2), 350-383.
- Falbe, C. M., & Yukl, G. (1992). CONSEQUENCES FOR MANAGERS OF USING SINGLE INFLUENCE TACTICS AND COMBINATIONS OF TACTICS. *Academy of management Journal*, *35*(3), 638-652. doi:10.2307/256490

- Fernandez, S., & Moldogaziev, T. (2013). Employee empowerment and job satisfaction in the US federal bureaucracy: A self-determination theory perspective. *The American Review of Public Administration*, 0275074013507478.
- Fisher, K. (2000). *Leading Self-directed Work Teams : A Guide to Developing New Team Leadership Skills*. New York: McGraw-Hill.
- Foot, D. A., & Li-Ping Tang, T. (2008). Job satisfaction and organizational citizenship behavior (OCB) does team commitment make a difference in self-directed teams? *Management Decision*, 46(6), 933-947.
- Gagné, & Deci, E. L. (2005). Self-Determination Theory and Work Motivation, 331.
- Gagné, & Koestner, R. (2002). *Self-determination theory as a framework for understanding organizational commitment*. Paper presented at the annual meeting of the Society for Industrial and Organizational Psychology, Toronto, Canada.
- Galletta, M., Portoghese, I., & Battistelli, A. (2011). Intrinsic motivation, job autonomy and turnover intention in the Italian healthcare: The mediating role of affective commitment. *Journal of Management Research*, 3(2), 1.
- Geertshuis, S. A., Morrison, R. L., & Cooper-Thomas, H. D. (2015). It's Not What You Say, It's The Way That You Say It: The Mediating Effect of Upward Influencing Communications on the Relationship Between Leader-Member Exchange and Performance Ratings. *Journal of Business Communication*, 52(2), 228-245. doi:10.1177/2329488415572784
- Gerstner, C. R., & Day, D. V. (1997). Meta-Analytic review of leader-member exchange theory: Correlates and construct issues: American Psychological Association.
- Ghiselli, R. F., & Ismail, J. A. (1996). Teams: Vehicle of Choice for Transporting the Organizational Future. *Hospitality Review*, 14(2), 8.

- Glassop, L. I. (2002). The organizational benefits of teams. *Human relations*, 55(2), 225-249.
- Goldstein, A. (2012). Revenge of the Managers Labor Cost-Cutting and the Paradoxical Resurgence of Managerialism in the Shareholder Value Era, 1984 to 2001. *American Sociological Review*, 77(2), 268-294.
- Graves, L. M. (2013). Self-determination at work: Understanding the role of leader-member exchange. *Motivation & Emotion*, 37(3), 518-536. doi:10.1007/s11031-012-9336-z
- Hackman, J. R., & Wageman, R. (1995). Total quality management: Empirical, conceptual, and practical issues. *Administrative science quarterly*, 309-342.
- Hair, Sarstedt, Hopkins, & Kuppelwieser. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106-121.
- Harris, & Raviv. (2002). Organization Design, 852.
- Harris, T. E. (1992). Toward effective employee involvement: An analysis of parallel and self-managing teams. *Journal of Applied Business Research*, 9(1), 25.
- Hayes, N. (2002). *Managing teams: A strategy for success*: Cengage Learning EMEA.
- Henderson, D. J., Liden, R. C., Glibkowski, B. C., & Chaudhry, A. (2009). LMX differentiation: A multilevel review and examination of its antecedents and outcomes. *The Leadership Quarterly*, 20, 517-534. doi:10.1016/j.leaqua.2009.04.003
- Herscovitch, L., & Meyer, J. P. (2002). Commitment to Organizational Change: Extension of a Three-Component Model. *Journal of applied psychology*, 87(3), 474-487.  
doi:10.1037//0021-9010.873.3.474

- Hickman, G. R., & Creighton-Zollar, A. (1998). Diverse self-directed work teams: Developing strategic initiatives for 21st century organizations. *Public Personnel Management*, 27(2), 187-200.
- Hirschhorn, L. (2002). *Managing in the new team environment: Skills, tools, and methods*: iUniverse.
- Janz. (1998). *The best and worst of teams: Self-directed work teams as an information systems development workforce strategy*. Paper presented at the Proceedings of the 1998 ACM SIGCPR conference on Computer personnel research.
- Janz. (1999). Self-directed teams in IS: correlates for improved systems development work outcomes. *Information & Management*, 35(3), 171.
- Jönsson, S., & Schölin, T. (2016). Process of change–competence development as a restructuring strategy. *Journal of Management Development*, 35(1), 2-16.
- Katzenbach, J. R., & Smith, D. K. (1993). *The wisdom of teams: Creating the high-performance organization*: Harvard Business Press.
- Kirkman, & Rosen. (1999). Beyond Self-Management: Antecedents and Consequences of Team Empowerment, 58.
- Kirkman, & Shapiro. (2001). The impact of cultural values on job satisfaction and organizational commitment in self-managing work teams: The mediating role of employee resistance. *Academy of management Journal*, 44(3), 557-569.
- LaFollette, W., Hornsby, J., Smith, B., & Novak, W. (2008). The Use of Work Teams in Organizations. *IEEE Engineering Management Review*, 1(36), 5.
- Levine, R. L., Leholm, A., & Vlasin, R. (2001). *Come be a leader in a self-directed work team: The dynamics of the transition from being a supervisor to a team leader*. Paper presented

- at the 2001 International Systems Dynamics Conference Proceedings. Atlanta, GA: Systems Dynamics Society.
- Manz, C. C., & Sims, H. P. (1993). *Business without bosses : how self-managing teams are building high-performing companies*: New York : Wiley, c1993.
- Manz, C. C., & Sims Jr, H. P. (1987). Leading Workers to Lead Themselves: The External Leadership of Self-Managing Work Teams. *Administrative science quarterly*, 32(1), 106-129.
- Melnyk, S. A., Stewart, D. M., & Swink, M. (2004). Metrics and performance measurement in operations management: dealing with the metrics maze. *Journal of operations management*, 22(3), 209-218.
- Meyer, & Allen. (1991). A THREE-COMPONENT CONCEPTUALIZATION OF ORGANIZATIONAL COMMITMENT. *Human Resource Management Review*, 1(1), 61.
- Meyer, & Allen. (2004). TCM employee commitment survey academic users guide 2004. *London, Ontario, Canada: The University of Western Ontario, Department of Psychology*.
- Meyer, Allen, & Smith. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of applied psychology*, 78(4), 538-551. doi:10.1037/0021-9010.78.4.538
- Meyer, Becker, & Vandenberghe. (2004). Employee commitment and motivation: a conceptual analysis and integrative model. *Journal of applied psychology*, 89(6), 991.
- Moran, L., & Musselwhite, E. (1993). *Self-Directed Work Teams: A Lot More Than Just Teamwork*: Zenger-Miller.

- Mowday, R. T., Porter, L. W., & Steers, R. M. (2013). *Employee—organization linkages: The psychology of commitment, absenteeism, and turnover*: Academic Press.
- Osterman, P. (2000). Work reorganization in an era of restructuring: Trends in diffusion and effects on employee welfare. *Industrial & Labor Relations Review*, 53(2), 179-196.
- Osterman, P. (2006). The Changing Employment Circumstances of Managers *America at Work* (pp. 193-209): Springer.
- Parker, S. K. (2003). Longitudinal effects of lean production on employee outcomes and the mediating role of work characteristics. *Journal of applied psychology*, 88(4), 620.
- Paul, R. J., Niehoff, B. P., & Turnley, W. H. (2000). Empowerment, expectations, and the psychological contract—managing the dilemmas and gaining the advantages. *The Journal of Socio-Economics*, 29(5), 471-485.
- Pearce, J. A., II, & Ravlin, E. C. (1987). The design and activation of self-regulating work groups. *Human relations*, 40, 751-782. doi:10.1177/001872678704001104
- Petty, G. C., Lim, D. H., Yoon, S. W., & Fontan, J. (2008). The Effect of Self-Directed Work Teams on Work Ethic. *Performance Improvement Quarterly*, 21(2), 49-63.  
doi:10.1002/piq.20022
- Porter, M. E. (2000). Location, competition, and economic development: Local clusters in a global economy. *Economic development quarterly*, 14(1), 15-34.
- Porter, M. E. (2011). *Competitive advantage of nations: creating and sustaining superior performance*: Simon and Schuster.
- Rajan, R. G., & Wulf, J. (2006). The flattening firm: Evidence from panel data on the changing nature of corporate hierarchies. *The Review of Economics and Statistics*, 88(4), 759-773.
- Rigdon, E. E. (1998). Structural equation modeling.



- Ringle, C. M., Wende, S., & Becker, J.-M. (2015). SmartPLS 3. *Boenningstedt: SmartPLS GmbH*, <http://www.smartpls.com>.
- Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee responsibilities and rights journal*, 2(2), 121-139.
- Scarnati, J. T. (2001). On becoming a team player. *Team Performance Management: An International Journal*, 7(1/2), 5-10.
- Schilder, J. (1992). Work teams boost productivity. *Personnel Journal*.
- Simmons, B. A., & Elkins, Z. (2004). The globalization of liberalization: Policy diffusion in the international political economy. *American political science review*, 98(1), 171-189.
- Stewart, G. L., & Barrick, M. R. (2000). Team structure and performance: Assessing the mediating role of intrateam process and the moderating role of task type. *Academy of management Journal*, 43(2), 135-148.
- Straub, D. W. (1989). Validating instruments in MIS research. *MIS quarterly*, 147-169.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research* (Vol. 15): Newbury Park, CA: Sage.
- Tepper, B. J., Eisenbach, R. J., Kirby, S. L., & Potter, P. W. (1998). Test of a Justice-Based Model of Subordinates' Resistance to Downward Influence Attempts. *Group & Organization Management*, 23(2), 144-160.
- Tompson, R., Barclay, D., & Higgins, C. (1995). The partial least squares approach to causal modeling: Personal computer adoption and uses as an illustration. *Technology Studies: Special Issue on Research Methodology*, 2(2), 284-324.
- Van den Broeck, A., Vansteenkiste, M., & De Witte, H. (2008). Self-determination theory: A theoretical and empirical overview in occupational health psychology.

- van Knippenberg, B., & Steensma, H. (2003). Future Interaction Expectation and the Use of Soft and Hard Influence Tactics. *Applied Psychology: An International Review*, 52(1), 55-67.
- Versteeg, A. (1990). Self-directed work teams yield long-term benefits. *Journal of Business Strategy*, 11(6), 9-12.
- Ward, P. T., McCreery, J. K., Ritzman, L. P., & Sharma, D. (1998). Competitive priorities in operations management. *Decision Sciences*, 29(4), 1035-1046.
- Wellins, S., Maybe, C., & Iles, P. (1994). Building a self-directed work team. *Managing learning*, 165-172.
- Womack, J. P., Jones, D. T., & Roos, D. (1990). *Machine that changed the world: Simon and Schuster*.
- Yeatts, D. E., & Hyten, C. (1998). *High-performing self-managed work teams : a comparison of theory to practice*: Thousand Oaks : Sage Publications, c1998.
- Yin, R. K. (2013). *Case study research: Design and methods*: Sage publications.
- Yukl. (2002). *Leadership in organizations*: Upper Saddle River, NJ : Prentice Hall, c2002.
- 5th ed.
- Yukl, Kim, & Falbe. (1996). Antecedents of Influence Outcomes. *Journal of applied psychology*, 81(3), 309-317.
- Yukl, Seifert, & Chavez. (2008). Validation of the extended influence behavior questionnaire. *The Leadership Quarterly*, 19(5), 609-621.
- Yukl, & Tracey. (1992). Consequences of influence tactics used with subordinates, peers, and the boss. *Journal of applied psychology*, 77(4), 525.

Zhao, H., Wayne, S. J., Glibkowski, B. C., & Bravo, J. (2007). The impact of psychological contract breach on work-related outcomes: a meta-analysis. *Personnel psychology*, *60*(3), 647-680.

## VITA

John Hoffman is the Vice President of Operations for Woodward Company. John has responsibility for Woodward's industrial combustion products along with the manufacturing operations for the entire Gas Turbine business unit.

Formerly a General Manager and Country Manager for Cooper Industries, John Hoffman brings 23 years of manufacturing leadership that spans functional and P&L management roles. John has worked in the United States and abroad having over 12 years of ex-patriate assignments that include China, Saudi Arabia, and Canada.

John Hoffman has advised and served non-profit and secondary learning organizations. Most recently, John was a board member of Lander University in Greenwood, South Carolina.

John is a graduate of the University of Cincinnati holding a bachelor of science in mechanical engineering. John holds a Masters of Business Administration from Clemson University. Additionally, John has successfully achieved both Six Sigma and APICS certifications.

John's current occupation requires dual residences in Greenville, South Carolina and Fort Collins, Colorado. John shares his life with Lucinda, who is his wife of 22 years. John and Lucinda are the parents of Courtney and Andrew, who are students at Furman University and Colorado State University respectively.