The Role of Exchange Ideology in Coworker Social Support and Work Engagement

Sharon Sawyer Cureton

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The University of Southern Mississippi

THE ROLE OF EXCHANGE IDEOLOGY IN COWORKER
SOCIAL SUPPORT AND WORK ENGAGEMENT

by

Sharon Sawyer Cureton

Abstract of a Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

May 2014
ABSTRACT

THE ROLE OF EXCHANGE IDEOLOGY IN COWORKER SOCIAL SUPPORT AND WORK ENGAGEMENT

by Sharon Sawyer Cureton

May 2014

Despite spending over $720 million annually on engagement improvement efforts, companies continue to lose over $600 billion to a stressed and disengaged workforce (Coffman & Gonzalez-Molina, 2002; ComPsych, 2010; Hollon, 2012). Research confirms the role of coworker social support as a job resource capable of impacting engagement (May, Gilson, & Harter, 2004; Richardsen, Burke, & Martinussen, 2006; Schaufeli & Bakker, 2004). Previous engagement studies have emphasized the supervisory and employee relationship with limited consideration of relationships between peer employees and the subsequent effects of that relationship on engagement. While exchange ideology has been offered as a possible reason individuals choose to engage in their work (Saks, 2006), there has been no specific investigation of the role of individual exchange ideology and its influence on coworker social support as a means to impact engagement levels. Understanding the dynamics within supportive work relationships is a promising avenue for future engagement research.

This cross sectional, non-experimental descriptive study investigates the relationships between coworker social support, work engagement, and exchange ideology at a utility company in the Southeastern United States. Positive relationships are identified between coworker social support and work engagement while a negative relationship is found between exchange ideology, coworker social support, and work
engagement. When the effects of exchange ideology are controlled, or held constant across the remaining two variables, the correlation between work engagement and coworker social support is lower. Additional research should focus on additional study designs, use of larger samples, and expanded inquiry of the variable relationships in other public service work cultures.
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SOCIAL SUPPORT AND WORK ENGAGEMENT

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A Dissertation
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Approved:

Heather M. Annulis
Director

Cyndi H. Gaudet

Dale L. Lunsford

Patricia P. Phillips

Maureen A. Ryan
Dean of the Graduate School

May 2014
DEDICATION

This dissertation project is dedicated to my husband, Steve, who has shown immeasurable patience, love, support, and encouragement throughout this journey. To my late father, Robert Jackson (Jack) Sawyer, who convinced me from an early age that I could do anything. And yes, I actually believed him. My mother, Jackie Sawyer, has been my inspiration to press on no matter how difficult the task. It is my hope that my sons, Grant and Chase, will likewise believe me when I tell them they can do anything with hard work and diligence. Press on toward the goal to win the prize for which God has called you…it is worth it!
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CHAPTER I

INTRODUCTION

State of the Workforce

In today's global economy, workers can no longer rely on lifetime employment or a high school diploma to ensure economic survival. Countries like India and China are quickly advancing in the areas of education and technology, making it easier in the flat world platform to digitize and decompose tasks and move work to the cheapest provider (Friedman, 2007). Not only is the workplace becoming more globalized, the nature of work and employment is also changing. Tasks and responsibilities have evolved from work on farms, in trade shops, and in cottage industries to work in companies with formalized employment relationships, flat organizational structures, and agile responses to a globally competitive marketplace (Vance, 2006). In the not so distant past, very simplistic, routine, and standardized tasks were often outsourced to other countries. However, as other countries increase their educational and training opportunities for citizens, more specialized and technical tasks are contracted to the lowest bidder (Friedman, 2007; Godin, 2010). With the over investment in fiber-optic cable, the start of the worldwide web, development and acceptance of work flow software, and outsourcing, work flows to locations around the globe and is completed at a fraction of the cost of American production (Friedman, 2007).

These changes affect United States workers and the available job opportunities. The effects include unemployment and underemployment. Unskilled workers are losing jobs to cheaper labor in other parts of the world as the world becomes more globalized and connected via technology (Friedman, 2007). The current unemployment rate in the United States is 8.1% (Bureau of Labor Statistics, 2012). Sixty-eight percent of
employed Americans report employers have taken steps such as laying off staff, reducing benefits or pay, requiring unpaid days off, or increasing work hours as a result of the weak economy (American Psychological Association, 2009). Nearly a quarter (23%) of employees rate their organization's morale as low (CareerBuilder, Inc., 2009). More than half (54%) of employees report they are likely to look for a new job once the economy improves (Adecco, 2009).

Within an uncertain economic environment, there are concerns with worker preparedness. Harkin (2003) reports employers estimate 39% of the current workforce and 26% of new hires will have basic skills deficiencies (e.g., reading, writing, and math). At the same time, 65% of all American employment requires specific skills. Of the existing workforce, employers find 75% need retraining merely to keep jobs. The Employment Policy Foundation reports similar findings: 80% of impending labor shortages will involve worker skill deficiencies, not the lack of workers potentially available (Dychtwald, Erickson, & Morison, 2006). Whether it is the lack of jobs, skill deficiencies to perform the jobs available, or simply trying to meet the demands of the workplace once hired, workers experience stress and burnout at ever increasing levels.

Workplace Stress

The American Psychological Association (2009) found 69% of employees report work is a significant source of stress. Eighty-three percent of employees report going to work even while sick, citing heavy workload, need to conserve time off to meet family needs, and a work environment where taking time off is risky (ComPsych Corporation, 2007). Fifty-one percent of employees report lower productivity at work as a result of stress (American Psychological Association, 2009). One-third of U.S. employees are chronically overworked (Galinsky et al., 2005), with 24% of employees working six or
more hours per week without pay and 47% of management doing the same (Randstad, 2007). Employees work more today than 25 years ago, estimated as equivalent to an additional month of work every year (Maxon, 1999). According to the International Labor Organization (1999), workers in the United States now "put in the longest hours on the job in industrialized nations…the equivalent of almost two working weeks more than their [next closest] counterparts in Japan" (p. 1).

Stress is not necessarily bad, as it can stimulate creativity and productivity (Maxon, 1999). The natural pattern of responding to a stress-causing event, reacting to it with increased tension, and then returning to a normal and relaxed state can be broken when stress is overwhelming and constant (Maxon, 1999). When this occurs in the workplace, employees become over-exposed to work related stressors, feel used up and worn out, and are unable to turn off at the end of the day (American Psychological Association, 2012; Bakker, Demerouti, & Schaufeli, 2005a; Crawford, LePine, & Rich, 2010). Work stress is the result of a number of issues: increases in work hours, changes in procedures and technology, additional pressures and demands of electronic availability, layoffs and reductions in force, and assuming additional levels of responsibility (American Psychological Association, 2009, 2012; American Psychological Association Practice Association, 2010; Maxon, 1999). Stress at work results in a myriad of problems such as difficulty focusing on tasks, missing days at work, arriving late to work, making errors, and missing deadlines (ComPsych Corporation, 2010, 2012).

Stress levels, workload, performance expectations, and general work pressures impact the physical and emotional well-being of employees in dramatic ways. Stress sets off an alarm in the brain which responds by preparing the body for defensive action
(Centers for Disease Control and Prevention, 1999). When stressful situations continue without resolution, the body is kept in a constant state of alarm which increases the wear and tear to the biological system. Mood and sleep disturbances, upset stomach and headache, and disturbed relationships with family and friends are the early signs of stress that can escalate into chronic diseases over time (Centers for Disease Control and Prevention, 1999). Stress related ailments and complaints account for 75-90% of all physician office visits and are linked to the six leading causes of death: heart disease, cancer, lung ailments, accidents, cirrhosis of the liver, and suicide (American Psychological Association, 2007). One provider of employee assistance (EAP) services reports a 120% increase in management referrals and fitness for duty evaluations since 2008 (Mirza, 2012). The return to work and fitness for duty evaluations are a byproduct of workplace stress as they signify crossing a threshold where an employee's mental and emotional well-being requires evaluation (Mirza, 2012).

Stress and inadequate sleep are pervasive within today's workforce as employees struggle to manage unprecedented work demands and personal and family responsibilities, all of which contribute to poor mental health and workplace ineffectiveness (Jacob, Bond, Galinsky, & Hill, 2008). Forty-four percent of workers gained weight in their current job and 32% say work related stress contributed to weight gain (CareerBuilder, Inc., 2010). More than six in ten American adults (63.1%) were either overweight (36.6%) or obese (26.5%) in 2009 (Gallup, 2010). The North Dakota Supreme Court ruled an employee's heart attack and subsequent death was compensable under worker's compensation because it was caused by workplace-related stress (Cadrain, 2010). Stressful working conditions also interfere with safe work practices and can later set the stage for injuries at work (Centers for Disease Control and Prevention, 1999).
Workplace injuries resulted in 4,609 fatalities in the United States in 2011 (Bureau of Labor Statistics, 2011). According to the National Institute for Occupational Safety and Health (NIOSH), exposure to stressful working conditions can have a direct influence on worker safety and health (Centers for Disease Control and Prevention, 1999).

The rise in workplace stress is not limited to the United States. China reports the greatest overall rise in workplace stress (85.9%) with Belgium, Mexico, South Africa, Spain, India, and the United States on or near the average for appreciable increases (Regus, 2009). The most cited cause of workplace stress internationally is an increased focus on profitability as employees are expected to take on more tasks and responsibilities (Regus, 2009). The World Health Organization calls stress "the health epidemic of the 21st century," and it is estimated to cost American businesses up to $300 billion a year. An estimated 13.5 million working days in the UK are lost due to stress (ComPsych, 2010, p. 1).

There are a number of economic and environmental reasons for stress levels experienced today. Relational experiences within the workplace is one contributor to stress. Since individuals spend so much time at the workplace and with each other, rumors, power plays, promotions, work assignments, and team interactions can create feelings and attitudes antagonistic to relationships, further increasing stress levels (Maxon, 1999). However, a supportive network of friends and coworkers is a situational factor recognized to help reduce the effects of stressful working conditions (Centers for Disease Control and Prevention, 1999). Godin (2010) also notes the importance of having individuals in the workplace able to collect, connect, and nurture relationships, a form of social intelligence needed for success. A strong social environment and support
from coworkers and supervisors can impact a worker's ability to cope with the stresses of demanding jobs.

When individuals are exposed to chronic emotional and interpersonal stressors on the job, the result is burnout, which is also described as a mental weariness and erosion of engagement (Maslach, Schaufeli, & Leiter, 2001; Schaufeli & Bakker, 2004; Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002; Schaufeli, Taris, & Van Rhenen, 2008). The positive antipode of burnout, work engagement is an additional concern in today's workplace (Maslach et al., 2001; Schaufeli & Bakker, 2004). Workplace stress and engagement levels impact the ability of employees and employers to compete on a global scale.

Work Engagement

With increasing work demands and stress, the importance of engaged employees is vital. According to Ulrich (1997), "Employee contribution becomes a critical business issue because in trying to produce more output with less employee input, companies have no choice but to try to engage not only the body but the mind and soul of every employee" (p. 125). Understanding the meaning of engagement is complicated, however, as engagement research produces a number of different definitions since Kahn's (1990) early work on the subject.

Kahn (1990) defines personal engagement as "the harnessing of organizational members' selves to their work roles" (p. 694). Kahn continues, saying "personal engagement is the simultaneous employment and expression of a person's 'preferred self' in task behaviors that promote connections to work and to others, personal presence, and active, full role performances" (Kahn, 1990, p. 700). Schaufeli et al. (2002) define engagement as:
A positive, fulfilling, work related state of mind that is characterized by vigor, dedication, and absorption. Engagement is seen as a persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behavior. Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties. Dedication refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge. Absorption is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work. (p. 74)

Having employees who are vigorous, dedicated, and absorbed in work is ideal but often difficult to achieve. When over 800 Human Resource Executive readers were asked to name the most significant HR challenges within their company, the need to keep employees engaged was number one at 45% (Flander, 2010). In the same survey, only 30% indicated employee engagement and morale were strong in their companies. The 2005 Gallup Management Journal reports 71% of the workforce is either not engaged or actively disengaged (Thackray, 2005). Development Dimensions International's (DDI) research reveals only 19% of employees are highly engaged, with Towers Perrin reporting 17% of the 35,000 employees surveyed as highly engaged (Wellins, Bernthal, & Phelps, 2005). Gallup estimates unengaged workers in the United Kingdom cost companies $64.8 billion a year, and in Japan, where only 9% of workers are engaged, lost productivity is estimated at $232 billion each year (Wellins et al., 2005). Gallup calculates the cost to the U.S. economy of actively disengaged employees is in the range
of $254 to $363 billion annually, and on average the lost productivity cost of active disengagement represents a full $3400 per $10,000 of salary (Coffman & Gonzales-Molina, 2002).

In response to the costs of an unengaged workforce, employers are countering with efforts to measure and increase employee engagement. Measuring employee engagement is currently a $720 million a year business, including both outsourced and internally developed programs (Hollon, 2012). Kowske (2012) reports in the Bersin & Associates report titled Employee Engagement: Market Review, Buyer’s Guide and Provider Profiles, the $720 million only represents about half of the projected $1.53 billion companies will eventually spend on engagement.

The costs of employee burnout and disengagement affect employees and employers in a number of ways. There is an opportunity to address both issues through the job resource of coworker social support.

Coworker Social Support and Exchange Ideology

The Job Demands-Resources Model (JD-R) is employed as the theoretical framework for engagement more often than any other theory or model (Bakker, Demerouti, & Schaufeli, 2003b; Bakker, Demerouti, & Euwema, 2005b; Bakker & Leiter, 2010; Crawford et al., 2010). The central tenet of the Job Demands-Resources Model is, regardless of the occupation involved, that *job demands* may evoke a strain or health impairment process, whereas *job resources* induce a motivational process leading to engagement, achievement of work goals, and personal growth (Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003a; Crawford et al., 2010; Hakanen, Schaufeli, & Ahola, 2008; Schaufeli & Bakker, 2004; Schaufeli, Bakker, & Van Rhenen, 2009). Within this model and subsequent research on engagement, a number of job resources are identified.
as having the potential to positively impact engagement and assist in managing work
demands (Bakker et al., 2003a; Bakker, Demerouti, & Verbeke, 2004). The current study
explores one job resource, coworker social support, and its relationship to work
engagement. Coworker social support is demonstrated in a number of ways: support,
advice, assistance, listening, respect, information sharing, concern, and interest in each
others lives. Coworker social support is the extent to which employees believe
coworkers are willing to provide work-related assistance helpful in completing work
tasks (Bakker et al., 2003b; Bakker et al., 2004; Bakker et al., 2005a; Bakker et al.,
2005b; Bakker, Van Emmerik, & Euwema, 2006; Jacob et al., 2008; Karasek et al., 1998;
May et al., 2004; Morgeson & Humphrey, 2006; Schaufeli & Bakker, 2004; Schaufeli et
al., 2008; Settoon, Bennett, & Liden, 1996; Susskind, Kacmar, & Borchgrevink, 2003).

The importance of coworker social support as a job resource is magnified by the
trend of flatter organizational structures, team based work, and more lateral workplace
interactions (Chiaburu & Harrison, 2008). Individuals in every type of organization have
coworkers who are partners in social and task interaction (Chiaburu & Harrison, 2008).
Within the interaction at the coworker level, social support influences engagement levels.

Exploring reasons for the influence of social support on engagement includes
consideration of a variable with the potential to affect the relationship. Individual
exchange ideology is the degree to which an individual's work effort is contingent upon
perceived organizational treatment (Eisenberger, Huntington, Hutchison, & Sowa, 1986;
Witt & Broach, 1991a; Witt, 1991b). Employees vary in personal beliefs regarding the
conditionality of work effort as a result of treatment by the organization (Eisenberger et
al., 1986; Pazy & Ganzach, 2009). Huseman, Hatfield, and Miles (1987) draw from
Equity Theory (Adams, 1963) and suggest individuals react in consistent but individually different ways based on their preference for equity, a form of equity sensitivity.

The interaction between an employer's behavior and an individual's exchange ideology shapes the degree to which individuals reciprocate with certain actions toward an organization (Coyle-Shapiro & Neuman, 2004). Specifically, individuals with a strong exchange orientation are more likely to return a good deed than those with a low exchange orientation (Cropanzano & Mitchell, 2005). Individuals with a low exchange ideology "continue to work hard even if they perceive themselves to be poorly or unfairly treated" (Coyle-Shapiro & Neuman, 2004, p. 153; Witt & Broach, 1991a; Witt, 1991b).

Research confirms the role of coworker social support as a job resource capable of impacting engagement (May et al., 2004; Richardsen et al., 2006; Schaufeli & Bakker, 2004). Investigating how individual exchange ideology might impact work engagement and coworker social support is an opportunity to consider a variable with the potential to affect work engagement.

Statement of the Problem

Today's businesses operate in a highly competitive and globalized environment requiring skilled and trained employees (Friedman, 2007). Workers are striving to update professional abilities, locate and keep jobs, and manage family demands often resulting in increased work hours, stress, burnout, and work disengagement (American Psychological Association, 2009; ComPsych, 2007; Galinsky et al., 2005; Gallup, 2006, 2010, 2011; Thackray, 2001, 2005). Despite spending over $720 million annually on engagement improvement efforts, companies continue to lose over $600 billion to a stressed and disengaged workforce. (Coffman & Gonzalez-Molina, 2002; ComPsych, 2010; Hollon, 2012).
Previous engagement studies have emphasized the supervisory and employee relationship with limited consideration of relationships between peer employees and the subsequent effects of that relationship on engagement. No specific investigations examine the role of individual exchange ideology and its influence on coworker social support as a means to impact engagement levels. Understanding the dynamics within supportive work relationships is a promising avenue for future research. It is essential for managers to identify ways to help employees manage stress and engage in work for companies to remain viable and profitable in the global marketplace.

Statement of Purpose

This study focuses on employee perceptions of three variables: work engagement, social support, and exchange ideology. The purpose of the study is to determine if a relationship exists between the three variables and the influence of exchange ideology on work engagement and coworker social support.

Significance of the Study

Work engagement, coworker social support, and exchange ideology do not exist in isolation. Work engagement and coworker social support are interconnected through research and foundational theories related to motivation and job satisfaction (Hackman & Oldham, 1980; Kahn, 1990; Kanter, 1977; Maslow, 1954; May et al., 2004; Richardson et al., 2006; Schaufeli & Bakker, 2004). Social Exchange Theory is used to explain the reasons individuals choose to engage themselves in work (Eisenberger et al., 1986; Saks, 2006; Settoon et al., 1996; Whitener, Brodt, Korsgaard, & Werner, 1998). Exchange ideology is a newcomer to the discussion and is studied in relation to how it shapes behavioral decisions. In particular, exchange ideology is analyzed to discover its influence on work engagement and coworker social support.
The costs and impact of stress and burnout on business and employees are established. While stress is clearly a problem, the focus of the current study is on the positive antipode of burnout, work engagement, and potential impacting variables. Seligman and Csikszentmihalyi (2000) describe the preoccupation in psychology with the study and treatment of psychopathology and damage, while neglecting aspects of the human condition that advance well-being and fulfillment (Korunka, Kubicek, Schaufeli, & Hoonakker, 2009; Schaufeli et al., 2009). Some researchers propose the focus on job stress and burnout, that has dominated the research agenda for over 25 years neglects the potentially positive effects of work such as engagement and call for a more balanced approach (Luthans & Yousseff, 2007; Maslach et al., 2001). Others suggest the focus on reducing workplace distress may only elevate individuals to a normal state of functioning, while investigating positive outcomes such as engagement and resilience may move individuals to levels of peak or extraordinary performance (Richardsen et al., 2006). These observations provide support for further exploration of engagement.

Research demonstrates the positive impact engaged employees have on an organization's bottom line (Buckingham & Coffman, 1999; Gallup 2006; Harter, Schmidt, & Hayes, 2002; Harter, Schmidt, Killham, & Agrawal, 2009; Lockwood, 2007). Companies are responding by administering engagement surveys and comparing results from year to year (Bakker & Leiter, 2010; O'Brien, 2012; Shuck & Wollard, 2010; Sugheir, Coco, & Kaupins, 2011; Thackray, 2001). However, a gap exists in knowledge between the need for engaged employees and scholarly research on techniques effective for creating and maintaining an engaged workforce (Shuck & Wollard, 2010). Saks (2006) recommends further research to test individual variables such as the moderating effects of exchange ideology on the relationships between antecedents and consequences.
of work engagement. Kular, Gatenby, Rees, Soane, and Truss (2008) suggest a need to test the effects of exchange ideology on the relationship between predictors and engagement since there is some evidence individuals with a strong exchange ideology are more likely to feel obligated to return benefits. Studying the role of coworker social support and individual exchange ideology in work engagement is a way to respond to such recommendations and explore potential useful practices in creating and maintaining an engaged workforce.

Considering social support as a tool to create a positive and engaging workforce offers an additional advantage. Creating an environment conducive to social support does not require additional compensation, significant monetary investment, or other structural changes to pay and benefits as other job resources such as autonomy, job control, and rewards might (Humphrey, Nahrgang, & Morgeson, 2007; Morgeson & Humphrey, 2006; Towers Watson, 2012). Seers, Petty, and Cashman (1995) suggest training team members in interpersonal skills to develop quality exchange relationships between team members and having managers hold employees accountable for exhibiting behaviors that encourage high quality exchange relationships (Cole, Schaninger, & Harris, 2002). These actions in support of coworker social support may actually be a determinant of success or failure of the work group (Cole et al., 2002).

Coworker social support and work engagement research are relevant today due to the growing trend to increase employee involvement and the use of team based work structures to complete work assignments (Flynn, 2003; Gamble & Gamble, 2010; Kerr, Hill, & Broedling, 1986; Mohrman, Cohen, & Mohrman, 1995; Noe, Hollenbeck, Gerhart, & Wright, 2009). While the focus in past engagement and satisfaction research may emphasize the supervisory and employee relationship, there is now a need to
consider a less hierarchical exchange relationship, the one between peer employees (Cole et al., 2002; Flynn, 2003; Flynn & Brockner, 2003; Organ & Paine, 1999). Researching individual exchange ideology's influence on coworker social support and work engagement places the emphasis squarely on the relationships between peer employees and the subsequent effects of that relationship.

In summary, the significance of the current study is the focus on engagement as a positive work condition and a shift from the prevalence of research on stress and burnout; the possibility of identifying actions to improve organizational effectiveness through the study of coworker social support and exchange ideology requiring little to no additional compensation or structural changes; the contemplation of peer work relationships as a determinant of engagement within the flatter organizations of today; and the opportunity to take into consideration the three concepts simultaneously and integratively. In so doing, understanding is enhanced regarding the relationships between each variable and the overall exchange dynamics within coworker relationships, ultimately influencing employee decisions to reciprocate behavior, manage stress, and engage in work (Cole et al., 2002).

Research Objectives

RO 1: Describe the demographic characteristics of sample participants.

RO 2: Determine the relationship between coworker social support and work engagement.

RO 3: Determine the relationship between exchange ideology and coworker social support.

RO 4: Determine the relationship between exchange ideology and work engagement.
RO 5: Determine the influence of individual exchange ideology on the coworker social support and work engagement relationship.

Conceptual Framework

The conceptual framework for the current study involves measuring employee perceptions on three variables: coworker social support, work engagement, and individual exchange ideology. Research Objective One involves collecting demographic data on study participants. Research suggests a relationship between coworker social support and work engagement (May et al., 2004; Richardsen et al., 2006; Schaufeli & Bakker, 2004). The hypothesized relationship will be investigated again within this study for Research Objective Two. Individual exchange ideology will be analyzed in relation to coworker social support and work engagement for Research Objectives Three and Four to determine if a relationship exists. Finally, individual exchange ideology will be measured to determine its influence on the suspected relationship between coworker social support and work engagement for Research Objective Five. Ultimately, the purpose of the research is to determine the relationship between coworker social support and work engagement and the influence of individual exchange ideology.

There are a number of theories that serve as a foundation of the current study. Engagement research suggests when employees are involved, energetic, and absorbed in their work they are engaged and experience behavioral changes allowing them to express themselves physically, cognitively, and emotionally during their work (Kahn, 1990; Schaufeli et al., 2002). Job Characteristics Theory (Hackman & Oldham, 1980) proposes certain work characteristics impact psychological states resulting in performance outcomes. Included within the job characteristics research is the significance of job feedback, social support, and meaningfulness of work to produce high employee
motivation, performance, and job satisfaction (Christian, Garza, & Slaughter, 2011; Hackman & Oldham, 1980; Humphrey et al., 2007). Abraham Maslow first introduced his now famous Hierarchy of Needs Theory 70 years ago in 1943. The theory suggests people are motivated by multiple needs and must fulfill basic needs before moving on to other higher order needs (Daft, 2010; Maslow, 1954). The theory underscores the importance of belonging and having the acceptance and love of others (i.e., level three within the five levels of needs). The Existence, Relatedness, and Growth (ERG) Theory by Alderfer (1972) is similar to Maslow's Hierarchy but reduces the five levels of needs to three, with Relatedness Needs involving satisfactory relationships with others as level two. The Work Empowerment Theory by Kanter (1977) suggests work environments with access to information, training opportunities, support, sponsorship and peer alliances, flattened and flexible organizational structures, autonomy and discretion, job rotation, and access to the power structure are empowering to employees (Kanter, 1977; Laschinger, Finegan, Shamian, & Wilk, 2001). Social Exchange Theory proposes obligations are created through the interactions individuals have with each other as relationships evolve over time into trusting and loyal commitments (Ganzach, Pazy, Ohayun, & Brainin, 2002). Saks (2006) offers Social Exchange Theory (SET) as an explanation for why individuals respond to various psychological and environmental conditions within the workplace with varying degrees of engagement with their work. Finally, the Norm of Reciprocity is required for Social Exchange Theory to operate. Individuals must accept this generalized moral norm to create an obligation and respond with certain actions as repayments for benefits received (i.e., pay, benefits, working conditions) (Gouldner, 1960).
The theories presented shape the foundation for the current study and the conceptual framework offered. Consistent throughout the theories is the role of work characteristics (e.g., coworker social support) in producing positive work outcomes (e.g., work engagement) and the significance of exchange and reciprocity as a stabilizing function within the work relationship.

![Conceptual Framework](image)

**Figure 1.** Conceptual Framework.

**Limitations**

The study methodology involves collecting cross sectional data at one point in time on three variables: coworker social support, work engagement, and exchange ideology. The study is descriptive; therefore, cause-effect relationships are not established within the confines of the research. Using self report survey data to collect perceptions on three different constructs also poses a number of issues. Method variance is variance attributable to measurement method rather than to the variables or constructs of interest (Campbell & Fiske, 1959). Common method variance, or variance occurring due to constructs measured in the same way, opens up the possibility of a potential error.
contaminating the three measures in a similar way, such that a correlation between two measures may be due to the fact that both come from the same source rather than a credible relationship between them (Rothbard, 2001; Spector, 1987). However, Spector (1987) suggests common method variance may be more of a problem with single items or poorly designed scales and less of a problem with well designed multi item validated scales (Lashinger et al., 2001).

If participants do not believe self report survey ratings are kept confidential, they may alter their ratings to make themselves or their supervisors look more favorable than reality in order to avoid retaliation. Gonyea (2005) describes this as social desirability bias. In addition, the possibility of winning a $25 gift card may influence the ratings of some participants. The restriction of range involved in the samples used in the current study may also affect the size of the correlations. The potential sample size is 210 employees. While there is concern with such errors as the sample is from the company where the researcher is employed, the validity of the survey instruments selected and the process used to administer the surveys consistently and anonymously, without the researcher's direct involvement or presence, seeks to decrease the effect of these limitations. By using previously validated measurements and research based administration procedures, the limitations are addressed in the study.

Delimitations

A number of options exist for surveying engagement levels. For the current study, the UWES was selected based on its consistency with the work engagement definition of interest by Schaufeli et al. (2002) and because it did not require financial resources to use the instrument as is the case with other surveys (i.e., Gallup's Q12). The study collects data from two different locations of the same company performing
essentially the same work. However, variations between the two locations and employees could affect the results through extraneous variance in the setting and heterogeneity of the respondents (Shadish, Cook, & Campbell, 2002). The study takes place within a utility company in the southern United States. The sample limits generalizability to other work settings different from the current study's environment. Despite consistent occupations and work processes, there remains the possibility of factors affecting the results from one work environment to another: location, survey participant and supervisor demographics, nature of work processes, training and development offerings, supervisory styles, work load, work practices, and equipment.

Definition of Terms

The following definitions are pertinent to the study:

1. **Absorption** is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work (Schaufeli et al., 2002).

2. **Dedication** is being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge (Schaufeli et al., 2002).

3. **Exchange ideology** is a set of global beliefs that work effort should depend on treatment by the organization (Eisenberger et al., 1986).

4. **Job demands** are physical, psychological, social, or organizational features of a job that require physical and/or psychological effort from an employee and are consequently related to physiological and psychological costs (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Schaufeli & Bakker, 2004).

5. **Job resources** are aspects of the job aiding in achieving work goals, stimulating personal growth and development, and reducing job demands and their associated
physiological and psychological costs (DeMerouti et al., 2001; Schaufeli & Bakker, 2004).

6. **Norm of Reciprocity** is a generalized moral norm defining certain actions and obligations as repayments for benefits received (Gouldner, 1960).

7. **Social Exchange Theory** views exchange relationships between individuals as actions contingent on rewarding reactions from others (Blau, 1964).

8. **Social support** reflects the degree to which a job provides opportunities for advice and assistance from others useful in achieving work goals (Cohen & Wills, 1985; Morgeson & Humphrey, 2006).

9. **Vigor** is characterized by high levels of energy and mental resilience while working. The willingness to invest effort in one's work and persistence even in the face of difficulties (Schaufeli et al., 2002).

10. **Work engagement** is a positive, fulfilling work related state of mind characterized by vigor, dedication, and absorption (Schaufeli et al., 2002).

**Summary**

The workplace today is filled with pressures and demands to remain competitive while operating within a global economy. Employees experience stress due to these demands resulting in diminished work performance, mental and physical problems, and increased costs for employers. The positive antipode of burnout is work engagement and it also suffers within a demanding work climate. Employees, on average, are not actively engaged in work. Lack of engagement adds to job dissatisfaction and decreased business performance. The job resource of coworker social support positively impacts work engagement and is particularly relevant to today's flatter organizational structures and team based work environment (Chiaburu & Harrison, 2008; May et al., 2004; Richardson
et al., 2006; Schaufeli & Bakker, 2004). The present study investigates the relationship between coworker social support and work engagement and explores the influence of exchange ideology within this relationship. Finally, the study yields concepts useful in understanding and predicting individual behavior and perceived engagement levels based on exchange ideology and coworker social support (Huseman et al., 1987).
CHAPTER II

LITERATURE REVIEW

Introduction

The workplace of the 21st century contains many challenges for employers and employees. As businesses compete in a global marketplace, workplace stress is commonplace, often leads to burnout, and results in a number of physical and emotional problems for employees (American Psychological Association, 2009; Centers for Disease Control, 1999; Maxon, 1999; Mirza, 2012). The antithesis of burnout is engagement, and research shows most employees are not engaged in work (Gallup, 2006; Maslach & Leiter, 1997; Thackray, 2005; Wellins et al., 2005). Coworker social support serves as a possible solution to both concerns, decreasing stress and increasing engagement. The current study explores how coworker social support is related to work engagement and the influence of exchange ideology within this relationship.

Describing the workplace stress epidemic provides the backdrop to understanding employee engagement, its relationship with coworker social support, and the role of exchange ideology. The review includes the history of engagement research, engagement definitions, foundational theories, models of engagement, engagement behaviors, drivers, and outcomes. From engagement research, social support in the workplace emerges as a job resource. Social Exchange Theory and the Norm of Reciprocity link social support to work engagement. Finally, the role of individual exchange ideology is explored in relation to its influence on coworker social support and engagement.

Stress is a mental and physical condition which affects an individual's productivity, effectiveness, personal health, and quality of work (Johnson & Indvik, 1996). Three out of every four American workers describe work as stressful (American
Psychological Association, 2009; Maxon, 1999). Employees work more today than 25 years ago with an estimated equivalent time of an additional month of work every year (Maxon, 1999). Work stress occurs as the result of a number of factors: increases in work hours, changes in procedures and technology, additional pressures and demands of electronic availability, layoffs and reductions in force, and assuming additional levels of responsibility (American Psychological Association, 2009, 2012; American Psychological Association Practice Association, 2010; Maxon, 1999). As the factors compound over time, employees become over-exposed to work related stressors, feel used up and worn out, are unable to turn off at the end of the day, and often operate in conditions of uncertainty leading to increased stress levels and exhaustion (American Psychological Association, 2012; Bakker et al., 2005a; Crawford et al., 2010; Maxon, 1999). As the organizational context and psychological contract at work changes in the face of mergers and downsizing, the notion of reciprocity, so crucial to maintaining employee well-being, can erode. The erosion often produces burnout, a prolonged response to chronic emotional and interpersonal stressors on the job (Maslach et al., 2001).

Since individuals spend more time than ever before at the workplace and with other employees, rumors, power plays, promotions, work assignments, and team interactions can create feelings and attitudes antagonistic to relationships, further increasing stress levels (Maxon, 1999). Stress at work results in other problems such as difficulty focusing on tasks, tardiness, work errors, and missed deadlines (ComPsych, 2010, 2012). Workplace relationships and job characteristics combine to create situations where employees experience stress levels leading to lowered productivity, physical problems, emotional conditions, lost workdays, and loss of a job (American
Psychological Association, 2009; Maxon, 1999). Stress related ailments and complaints account for 75-90% of physician office visits and link to the six leading causes of death: heart disease, cancer, lung ailments, accidents, cirrhosis of the liver, and suicide (American Psychological Association, 2007). In some cases, sustained negative stress and burnout can even lead to workplace violence, the ultimate manifestation of job stress (Couto & Lawoko, 2011; Di Martino, 2003; Johnson & Indvik, 1996; Sharif, 2000). Limited job control, limited opportunities for alternative employment, and skill underutilization, have been found as significant predictors of workplace assault (Di Martino, 2003). A Northwestern National Life Insurance Company study found 15% of workers had been attacked on the job at least once in their lives, with 15% of said attacks the result of an interpersonal conflict and nearly one attack in six involved a lethal weapon (cited in Johnson & Indvik, 1996). The American Management Association found equally disturbing results when they polled 311 companies on workplace violence and found nearly one quarter reporting at least one employee had been attacked or killed on the job in the last four years (cited in Johnson & Indvik, 1996).

The rise in workplace stress is not limited to the United States (U.S.). China reports the greatest overall rise in workplace stress (85.9%) with Belgium, Mexico, South Africa, Spain, India, and the U.S. on or near the average for appreciable increases in workplace stress (Regus, 2009). The most cited cause of workplace stress internationally is an increased focus on profitability as employees are expected to take on more tasks and responsibilities (Regus, 2009). An estimated 13.5 million working days in the United Kingdom (U.K.) are lost due to stress (ComPsych, 2010). The World Health Organization calls stress "the health epidemic of the 21st century" and estimates the cost to American businesses total $300 billion a year (ComPsych, 2010). Stress management
may very well be the most important challenge for businesses of the 21st century (Maxon, 1999).

Work Engagement. Workplace stress, burnout, and work engagement are different types of employee well-being with engagement referred to by some researchers as the positive antipode of burnout (Maslach et al., 2001; Schaufeli & Bakker, 2004). While stress and burnout levels are high, the positive antipode, work engagement, is low. Instead of focusing on the pathology and deficits in human strengths and functioning, researchers are giving more attention to the positive antithesis of burnout, work engagement (Maslach et al., 2001). With this shift in focus, Schaufeli et al. (2002) define work engagement as a positive, fulfilling work related state of mind characterized by vigor, dedication, and absorption. Engaged workers have high levels of energy and mental resilience (i.e., vigorous), are strongly involved in work (i.e., dedication), and are fully concentrated and happily engrossed in work (i.e., absorption) (Schaufeli et al., 2002).

Engagement is related to a number of meaningful business outcomes such as customer satisfaction and loyalty, profitability, and productivity (Harter et al., 2002). Engaged workers are less stressed, more satisfied with personal lives, and use less health care than actively disengaged workers (Pitt-Catsouphes & Matz-Costa, 2008). Despite the positive aspects of work engagement, the 2005 Gallup Management Journal reports 71% of the workforce are either not engaged or actively disengaged (Thackray, 2005). Research from Development Dimensions International (DDI) reveals only 19% of employees are highly engaged, and Towers Perrin reports only 17% of the 35,000 employees surveyed as highly engaged (Wellins et al., 2005). Gallup calculates the cost to the U.S. economy of actively disengaged employees in the range of $254 to $363
billion annually, and on average the lost productivity costs of active disengagement represents $3400 per $10,000 of salary (Coffman & Gonzalez-Molina, 2002).

As in the case of stress, the costs of a disengaged workforce are not specific to the United States. The costs of disengagement exist to varying degrees in every country, industry, and organization as cited by Gallup (Rath & Clifton, 2004). Gallup estimates unengaged workers in the United Kingdom cost companies $64.8 billion a year (Wellins et al., 2005). In Japan, where only 9% of workers are engaged, lost productivity is estimated to cost $232 billion each year (Wellins et al., 2005). The Corporate Leadership Council (2002) studied engagement levels of more than 50,000 employees at 59 global organizations and found 10% of employees globally were fully disengaged and not committed to their organizations' goals (Attridge, 2009). Using data from over 85,000 employees from 16 countries, Towers Perrin (2006) find 24% of employees worldwide are disengaged (Attridge, 2009).

Within this tenuous business situation of high employee stress levels and low employee engagement, businesses try to operate profitably in a globally competitive marketplace. Unskilled U.S. workers continue to lose jobs to cheaper international labor, as the world becomes more globalized and connected via technology (Friedman, 2007). This loss combined with the recent recession, translates into an unemployment rate in the United States of 8.1% (Bureau of Labor Statistics, 2012). Sixty-eight percent of employed Americans report employers have taken steps such as laying off staff, reducing benefits or pay, requiring unpaid days off, or increasing work hours in the past year as a result of the weak economy (American Psychological Association, 2009). While many challenges in the workplace exist for employees and employers alike, opportunities also exist to identify ways to address challenges in a positive manner.
In Kahn's (1990) qualitative study of architectural firm employees and camp counselors, the concept of engagement gained attention. One reason interest in employee engagement continues is the wealth of research indicating the positive impact engaged employees have on an organization’s bottom line (Bates, 2004; Gallup, 2006; Harter et al., 2002, 2009; Lockwood, 2007; Vance, 2006; Wellins et al., 2005). Research demonstrates the power of an engaged workforce to increase income and to create higher returns for shareholders (Buckingham & Coffman, 1999). Additionally, after comparing top-quartile to bottom-quartile engagement business units, Harter et al. (2009) report the following median percentage differences: 16% in profitability, 18% in productivity, 49% in safety incidents, 60% in quality (defects), and 37% in absenteeism. Another study tracking the revenue generated by account executives and loan officers in various divisions of a mortgage company found actively disengaged employees produce an average of 28% less revenue than those who are fully engaged (Bates, 2004). Companies interested in an engaged workforce and the potential to improve business results have opportunities to create and nurture work environment characteristics shown to increase engagement.

Engagement research offers the Job Demands-Resources Model describing a number of work characteristics or job resources, impacting engagement in the workplace and offsetting the high job demands leading to stress and burnout (Demerouti et al., 2001). Job resources include: feedback, rewards, job control, participation, job security, supervisor and coworker social support, autonomy, access to information, job variety, task significance, and respect (Bakker et al., 2003b; Bakker et al., 2005b; Bakker & Demerouti, 2008; Demerouti et al., 2001; Galinsky, Bond, & Hill, 2004; Hackman & Oldham, 1980). A support network of friends and coworkers is valuable in reducing
stress and increasing engagement (Centers for Disease Control and Prevention, 1999; May et al., 2004; Richardsen et al., 2006; Schaufeli & Bakker, 2004). Coworker social support includes providing information, resources, support, empathy, mentoring, and other forms of help within the work relationship (Chiaburu & Harrison, 2008). These behaviors help to reduce tensions and role conflict, ease work demands, and facilitate smooth social transactions for coworkers (Chiaburu & Harrison, 2008). The linkage between coworker social support and engagement can be explained, in part, by the Social Exchange Theory (Eisenberger et al., 1986). Social Exchange Theory has been offered as a reason for the relationship between coworker social support and increased work engagement (Eisenberger et al., 1986; Saks, 2006; Settoon et al., 1996; Whitener et al., 1998).

Social Exchange Theory and Ideology. Social Exchange Theory (SET) suggests obligations occur over time through a series of interactions between individuals in interdependent relationships (Saks, 2006). One example of such a relationship is the employment contract. Over time, individuals can repay obligations to the organization for pay and other benefits received through work engagement (Saks, 2006). Therefore, SET is used as a theoretical foundation to explain the reasons individuals choose to engage in work (Saks, 2006). The support of coworkers may also create obligations and reciprocating behaviors in the form of work engagement (Chiaburu & Harrison, 2008). How individuals respond to the obligations may be determined, in part, by their individual exchange ideology.

Exchange ideology describes an individual's belief that work effort depends on treatment of the employee by the organization and others (Eisenberger et al., 1986; Ladd & Henry, 2000; Pazy & Ganzach, 2009). Engagement is an individual decision impacted
by a number of variables. An individual’s exchange ideology may impact perceived obligations and decisions to reciprocate within the workplace and to engage oneself in work (Coyle-Shapiro & Neuman, 2004; Eisenberger et al., 1986).

The next section begins by establishing how engagement is defined. Despite the amount and variety of engagement research from practitioners and academics, a consistent definition of engagement is difficult to establish.

Definitions of Engagement

As the research on engagement has progressed over the past 20 years, the terms and definitions have also evolved and changed. With this evolution comes different perspectives on engagement resulting in a diverse set of definitions. Simpson (2009) groups the various terms and definitions under the following engagement categories: personal engagement, burnout-engagement, work engagement, and employee engagement.

*Personal Engagement.* Kahn (1990) defines personal engagement as "the harnessing of organizational members' selves to work roles" (p. 694). Kahn suggests "personal engagement is the simultaneous employment and expression of a person's 'preferred self' in task behaviors that promote connections to work and to others, personal presence, and active, full role performances" (Kahn, 1990, p. 700).

*Burnout-Engagement.* The research on burnout began in the service industry and grew to include many different types of occupations in a variety of countries (Maslach et al., 2001). With the emphasis on positive psychology, researchers consider engagement the antithesis or antipode of burnout (Maslach & Leiter, 1997). Maslach et al. (2001) define burnout as a psychological syndrome in response to chronic emotional and interpersonal stressors on the job. Burnout has also been characterized as an "erosion of
engagement with the job” (Maslach & Leiter, 1997, p. 416; Schaufeli et al., 2002).
Engagement, on the other hand, can be characterized as high energy, high involvement, and high efficacy-the opposite of burnout's key dimensions: exhaustion, cynicism, and reduced efficacy (Maslach & Leiter, 1997; Maslach et al., 2001). While some studies demonstrate burnout as the opposite of engagement, the two concepts are empirically distinctive constructs and considered different types of employee well-being by Schaufeli et al. (2008). Schaufeli et al. (2002) describe burnout and engagement as opposite concepts with different structures and suggest the concepts should be measured independently with different instruments. Schaufeli et al. (2002) find a negative relationship between engagement and burnout and a sharing of about one quarter to one third of variance.

**Work Engagement.** Using research on the relationship between burnout and engagement, Schaufeli et al. (2002) offer the following definition of work engagement:

A positive, fulfilling, work related state of mind that is characterized by vigor, dedication, and absorption. Engagement is seen as a persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behavior. Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties. Dedication refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge. Absorption is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work. (p. 74)
Work engagement is more than an investment of a single aspect of a person; it represents an investment of multiple dimensions (i.e., physical, emotional, and cognitive) as an engaged employee experiences a connection with work on multiple levels (Christian et al., 2011). Bakker and Leiter (2010) define work engagement as a motivational concept where employees feel compelled to strive towards a challenging goal and a reflection of the personal energy employees bring to work.

Work engagement is also described as a state of mind relatively enduring and stable with fluctuations over time and between people (Schaufeli et al., 2002). Research indicates work engagement is highly stable and long lasting, even over a three year follow-up (Seppala et al., 2009). Engagement can also reflect the simultaneous investment of cognitive, emotional, and physical energies where an individual is actively and completely involved in the full performance of a role (Rich, LePine, & Crawford, 2010). Christian et al. (2011) find work engagement aligns with the motivating potential of the work context, argue engagement could be facilitated through job design, and feel engagement is strongly related to job characteristics associated with the perception of meaningfulness of the work itself. The ideas are consistent with Kahn's (1990) psychological condition of meaningfulness as a precursor to engagement and May's et al. (2004) research where meaningfulness has the strongest linkage to engagement. In a study by the Corporate Leadership Council (2004), job design levers have maximum impact on discretionary effort. The most significant levers include: understanding how to do one's job and a belief in its importance, strikingly similar to the definition of meaningfulness offered by Kahn (1990).

*Employee Engagement.* Employee engagement is the final definition garnering attention in the literature. Harter et al. (2002) define employee engagement as "an
individual's involvement and satisfaction with as well as enthusiasm for work" (p. 269). Saks (2006) defines employee engagement as a distinct and unique construct having cognitive, emotional, and behavioral components associated with individual role performance. Saks distinguishes employee engagement from other related constructs such as organizational commitment, organizational citizenship behavior, and job involvement. Other employee engagement definitions include: a state where employees find meaning in work and devote discretionary effort and time to work (Pitt-Catsouphes & Matz-Costa, 2008); employees' willingness and ability to contribute to company success and the broad and deep connections people have with an organization (Towers Perrin, 2003, 2009); employees with passion who feel a profound connection to a company and drive innovation to move the organization forward (Gallup, 2006); an individual employee's cognitive, emotional, and behavioral state directed toward desired organizational outcomes (Shuck & Wollard, 2010); and a situation in which employees enjoy work, contribute enthusiastically to meeting goals, and feel a sense of belonging and commitment to the organization (Daft, 2010).

Undoubtedly, many definitions of engagement appear in the literature. Many of the definitions evolve from the business and consulting literature rather than academic and empirical research creating a "dearth of research on employee engagement in the academic literature" (Macey & Schneider, 2008a; Saks, 2006, p. 600). Some suggest practitioner research on engagement may lack the "rigor of academic scrutiny" (Shuck & Wollard, 2010, p. 91). In addition to the difference in perspectives, other differences exist in how industry views engagement and how academics describe engagement. Macey and Schneider (2008a) suggest an industry focus on engagement as a unit level outcome used to take actions for improving retention, performance, and commitment.
Conversely, academics approach engagement as a state of fulfillment in employees, an individual construct for measurement (Wefald & Downey, 2009).

For the purposes of the current study, the definition for work engagement by Schaufeli et al. (2002) is used: a positive, fulfilling work related state of mind characterized by vigor, dedication, and absorption. Bakker and Leiter (2010) also prefer this definition as a superior approach over others because it describes work engagement as a specific psychological state specifying indicators of engagement rather than work environment characteristics supporting engagement (Macey & Schneider, 2008b). Work engagement is more specific as it refers to the relationship of the employee with work, whereas employee engagement may also include the relationship between the employee and the organization (Bakker & Leiter, 2010). Finally, since behavioral engagement is observable, it is more often the focus of companies (Saks, 2006). Vigor, dedication, and absorption are clearly behavioral components of employee engagement.

In summary, there is no shortage of engagement definitions in the literature. Four different engagement definition categories are presented: personal engagement, burnout-engagement, work engagement, and employee engagement. A review of how the concept of engagement has developed in the academic and practitioner literature is presented next.

**History of Engagement Research**

Researchers credit Kahn for introducing the concept of engagement within the workplace context in academic literature (Jeung, 2011). In Kahn's (1990) *Academy of Management Journal* article, "Psychological Conditions of Personal Engagement and Disengagement at Work," he describes a qualitative study designed to explore the conditions at work in which people may express their personal selves or withdraw and
defend their personal selves. Kahn (1990) credits Goffman (1961) for the theoretical foundation of his research although Kahn offers a new perspective on attachment and detachment in the workplace (Shuck & Wollard, 2010). Kahn (1990) proposes that "people employ and express themselves physically, cognitively, and emotionally during role performances" by becoming physically involved in tasks, cognitively vigilant, and empathetically connected to others (p. 694). Kahn notes the connection to the Job Characteristics Model (Hackman & Oldham, 1980) which suggests several critical psychological states influencing employee motivation and offers three psychological conditions influencing people to personally engage. The psychological conditions are: meaningfulness, safety, and availability (Kahn, 1990). Psychological safety relates to the importance of a supportive workplace. When individuals are in organizational settings perceived as trustworthy, secure, predictable, and clear in terms of behavioral consequences, the psychological condition of safety is experienced (Rich et al., 2010). Psychological safety is experienced as a result of managerial support, encouraging and trusting relationships with others in the organization, and control over work so an employee feels comfortable taking risks, exposing their real selves, and trying new things without fear of negative consequences (Kahn, 1990).

On the practitioner side of engagement research, the 1999 book by Buckingham and Coffman, *First Break All the Rules*, gained popularity in management circles, particularly due to the extensive Gallup research presented on the topic of employee engagement (Shuck & Wollard, 2010). The large amount of data Gallup collected since 1985 provides credible statistical evidence for recommendations and conclusions (Ferguson, n.d.). Consulting firms and professional organizations like the American Society for Training and Development and the Society for Human Resource Management
also embrace the concept of engagement and continue research particularly on the link between engagement and profitability, productivity, net income growth, earnings per share, reduced turnover, learning, and customer satisfaction (Arapoff, 2010; Corporate Leadership Council, 2004; Czarnowski, 2008; Gallup, 2006, 2011; Lockwood, 2007; Shuck & Wollard, 2010; Society of Human Resource Management, 2012; Vance, 2006).

Maslach et al. (2001) add to the engagement research by suggesting employee engagement is the direct opposite of the three burnout dimensions of exhaustion, cynicism, and reduced professional efficacy. The Maslach Burnout Inventory (MBI), previously used to measure burnout, was also used by Maslach et al. (2001) to predict engagement. According to Maslach et al. (2001), six areas of work-life lead to either burnout or engagement: workload, control, rewards and recognition, community and social support, perceived fairness, and values.

Harter et al. (2002) use meta-analysis to examine the relationship at the business-unit level between employee satisfaction-engagement and the business-unit outcomes of customer satisfaction, productivity, profit, employee turnover, and accidents. Harter et al. (2002) use a database of 7,939 business units across multiple industries to study and demonstrate the profit linkage to the concept of employee engagement (Shuck & Wollard, 2010). The study concludes employee satisfaction and engagement relate to meaningful business outcomes (e.g., customer satisfaction-loyalty, profitability, productivity, turnover, safety) at a significant level vital to many organizations in terms of monetary value. In addition, the relationship generalizes across many different types of companies (e.g., banking, healthcare, plants or mills, schools, restaurants, and dealerships) (Harter et al., 2002).
In 2004, May et al. present the first empirical research testing Kahn's (1990) three psychological conditions of meaningfulness, safety, and availability. The research shows significant positive relations with engagement at work (Jeung, 2011). Of the three conditions, meaningfulness displays the strongest relationship to engagement with job enrichment and work role fit, linking positively to psychological meaningfulness. Rewarding coworker and supportive supervisor relations are positive predictors of psychological safety (May et al., 2004). Psychological safety occurs when employees believe they will not suffer or receive negative consequences to self-image, status, or career for expressing their true selves at work (Kahn, 1990; May et al., 2004). Using Kahn's (1990) theory, which states characteristics of employees and organizations drive beliefs regarding meaningfulness, safety, and availability, Rich et al. (2010) offer the following research findings:

- Perceptions of organizational and work factors related to tasks and roles are the primary influences on psychological meaningfulness;
- Perceptions of social systems related to support and relationships are the primary influences on psychological safety; and
- Self-perceptions of confidence and self-consciousness are the primary influences on psychological availability (p. 620).

Saks (2006) tests the antecedents and consequences of employee engagement. Prior to this research, there was little academic research showing the connection between employee engagement drivers and employee engagement consequences (Shuck & Wollard, 2010). In addition, Saks (2006) was the first to make a distinction between organizational engagement and job engagement, suggesting they are related but distinct constructs and the "psychological conditions that lead to job and organization
engagements as well as the consequences are not the same" (p. 613). Saks (2006) also incorporates Social Exchange Theory to explain why employees make decisions to engage in the workplace. The research indicates perceived organizational support predicts both job and organization engagement; job characteristics predict job engagement; and procedural justice predicts organization engagement.

Macey and Schneider (2008a) divide engagement into three separate but related constructs of trait, state, and behavioral engagement. The researchers discuss the role of transformational leadership and performing work with positive motivational attributes (Hackman & Oldham, 1980) as impacting both state and behavioral engagement.

Research on employee engagement has advanced since Kahn's early work in 1990 to include interest from both academics and practitioners. Researchers continue to add to the understanding of engagement by testing relationships, identifying antecedents and consequences, and constructing definitions. An examination of several foundational theories upon which the concepts of employee engagement, coworker social support, and exchange ideology are built is described in the next section.

**Foundational Theories**

Work engagement has theoretical roots in motivational theory by Maslow (1954), Alderfer (1972), and Kanter (1977). Work engagement is further influenced by job design research by Hackman and Oldham (1980) and the Job Characteristics Model. A brief review of the theoretical foundation increases understanding of work engagement and recent research on engagement models.

**Hierarchy of Needs Theory.** Abraham Maslow first introduced his now famous Hierarchy of Needs Theory 70 years ago in 1943. The theory suggests people are motivated by multiple needs and must fulfill basic needs before moving on to other
higher order needs (Daft, 2010; Maslow, 1954). Once a need is met, the need is no longer as important and the next higher level need is then pursued. According to Maslow, there are five types of motivating needs and individuals move from one to another in hierarchical order. The five motivating needs are presented as five levels with level one as the most basic needs of humanity and level five as the need to reach one's fullest potential: physiological (basic, human physical needs), safety (safe and secure environment), belonging (acceptance and love of others), esteem (positive self image, attention, recognition, and appreciation), self-actualization (self-fulfillment) (Daft, 2010). Despite the popularity of Maslow's theory, there have been modifications to the hierarchy he proposes.

Existence, Relatedness, and Growth (ERG) Theory. Due to concerns with the lack of empirical verification of Maslow's work, Alderfer (1972) offers the ERG theory which reduces the levels of need to three: existence needs (e.g., physical well being), relatedness needs (e.g., satisfactory relationships with others), and growth needs (e.g., development of human potential) (Daft, 2010). Alderfer also suggests if individuals are unable to meet a higher level of need, they may "regress to an already fulfilled lower order need" (Daft, 2010, p. 455). Both the Hierarchy of Needs and ERG Theory can relate to the ways in which individuals make work behavior decisions and how companies seek to motivate employee behavior to meet business goals. Of particular note is the role of social support in the workplace and how it relates to the concepts presented in both theories. In Maslow's Hierarchy of Needs theory, levels three and four (i.e., belonging and esteem) relate to relationships and support as does Alderfer's relatedness needs in the ERG theory.
Work Empowerment Theory. Kanter (1977) proposes individuals respond rationally to work based on the structural issues and environment they are placed within, including "work roles and the effects of opportunity, power, and numbers" (p. 261). The work empowerment theory suggests work environments with access to information, training opportunities, support, sponsorship and peer alliances, flattened and flexible organizational structures, autonomy and discretion, job rotation, and access to the power structure are empowering to employees (Kanter, 1977; Laschinger et al., 2001). As a result of empowerment, employees commit to an organization, experience higher levels of trust in management, are more accountable for work, and are more effective in meeting organizational goals (Kanter, 1977; Laschinger & Havens, 1996; Laschinger, Wong, McMahon, & Kaufmann, 1999; Laschinger, Finegan, Shamian, & Casier, 2000; Laschinger et al., 2001). The mandate of management is to create conditions where employees have the information, support, and resources needed to accomplish tasks and give employees opportunities to develop (Lashinger et al., 2001). In Kanter's theory, there is a consistent theme of support, sponsorship, and peer alliances as a key resource for effective and empowered employees in the workplace. The core dimensions and recommendations from Kanter (1977) are consistent with job resources identified by other researchers as positively related to work engagement (Bakker & Demerouti, 2008; Bakker, 2011; Corporate Leadership Council, 2004; Koyuncu, Burke, & Fiksenbaum, 2006; Richardsen et al., 2006). Many of the recommendations from Kanter are further developed in the Job Characteristics Model from Hackman and Oldham (1980).

Job Characteristics Theory. The Job Characteristics Theory (Hackman & Oldham, 1980) suggests job design is effective in motivating employees. The model resulting from the Job Characteristics Theory includes five core job design dimensions.
leading to three psychological states that result in four positive work outcomes. Job
design dimensions include skill variety, task identity, and task significance, which lead to
the psychological state of meaningful work. Autonomy is another job design dimension
central to motivation as it provides freedom to take action and leads to a sense of
responsibility for outcomes. A final job design dimension is feedback, which provides
knowledge of the outcomes of an individual's work required for emotional connection to
the work (Daft, 2010; Gagne’ & Deci, 2005). In essence, job design characteristics
impact employees' psychological states which, ultimately, shape work behaviors
(Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009b). The Job Characteristics Model
identifies critical psychological states as a theoretical and practical link between
perceived job characteristics and internal work motivation (Renn & Vandenberg, 1995).
Research offers support for this link as the psychological states contribute significantly to
the job characteristics model's explanatory power (Renn & Vandenberg, 1995). Figure 2
depicts the Job Characteristics Model by Hackman and Oldham (1980).

Hackman and Oldham's Job Characteristics Model

<table>
<thead>
<tr>
<th>Core Dimensions</th>
<th>Psychological States</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill Variety</td>
<td>Meaningfulness of Work</td>
<td>High intrinsic motivation</td>
</tr>
<tr>
<td>Task Identity</td>
<td></td>
<td>High job performance</td>
</tr>
<tr>
<td>Task Significance</td>
<td></td>
<td>High job satisfaction</td>
</tr>
<tr>
<td>Autonomy</td>
<td>Responsibility for Outcomes</td>
<td>Low absenteeism and turnover</td>
</tr>
<tr>
<td>Feedback</td>
<td>Knowledge of Results</td>
<td></td>
</tr>
</tbody>
</table>

*Figure 2. Job Characteristics Model. The model illustrates the core job characteristics that impact critical psychological states resulting in important personal and business outcomes (Hackman & Oldham, 1980).*
Other researchers refine core job characteristics into three distinct categories of motivating factors related to job design: motivational (e.g., autonomy, task variety, feedback, job complexity), social support (e.g., assistance and advice from supervisors and coworkers), and contextual (e.g., physical demands and work conditions) (Christian et al., 2011; Humphrey et al., 2007). Consistent with the Hackman and Oldham (1980) model, work characteristics motivate workers by creating experiences of meaningfulness, responsibility, and knowledge of results (Christian et al., 2011). The role of social support continues as a persistent variable in the area of work design, employee motivation, and positive work outcomes.

Social Exchange Theory. Saks (2006) offers Social Exchange Theory (SET) as an explanation for why individuals respond to various psychological and environmental conditions with varying degrees of engagement. Social Exchange Theory suggests obligations are created through the interactions individuals have with each other as relationships evolve over time into trusting and loyal commitments (Gazach et al., 2002). Obligations occur only when individuals follow the rules of exchange which involve reciprocity, a "reciprocal interdependence" (Cropanzano & Mitchell, 2005; Kular et al., 2008, p. 5; Saks, 2006; Whitener et al., 1998). Social exchanges may involve extrinsic benefits with economic value as well as intrinsic benefits without any direct objective economic utility (e.g., social support) (Whitener et al., 1998). In the workplace, a way for employees to repay employers for the economic and socio-emotional resources they provide is by choosing to engage themselves in work (Saks, 2006). Individuals often find a state of obligation to others highly disagreeable (Cialdini, 2007). Therefore, the establishment of high-quality exchange relationships between supervisors and employees create obligations for employees to reciprocate in positive, beneficial ways in order to
reduce a sense of indebtedness to the employer (Eisenberger et al., 1986; Settoon et al., 1996; Whitener et al., 1998). More is presented later in this chapter on Social Exchange Theory, it origins, and research findings as it relates to its impact on work engagement.

In considering the theoretical support of engagement research, there is a noticeable relationship between various job resources, such as social support, and engagement and employee motivation. Building on this framework, a number of researchers develop models to further illuminate engagement concepts.

Models of Engagement

Models are helpful in understanding concepts as they seek to represent, in miniature or simplified form, how something is constructed (Model, n.d.). As researchers present varying ideas, explanations, and models of engagement, the concept is deconstructed into simplified elements easier to understand. The models can be pictures, diagrams or other straightforward and uncomplicated explanations. An overview of various engagement models is presented here.

Macey and Schneider (2008a) propose three facets of employee engagement: trait engagement, state engagement, and behavioral engagement. Trait engagement refers to the psychological traits employees bring to work which are less affected by the work or workplace. Trait engagement affects state engagement. State engagement includes the feelings of involvement, commitment, and satisfaction an employee has in the workplace and is influenced by management action. Finally, behavioral engagement involves an employee going beyond a job description and becoming adaptive in the face of opportunity and challenges (Sugheir et al., 2011). Macey and Schneider (2008b) suggest state and behavioral engagement relate to competitive advantage outcomes such as return on assets, profits, and shareholder value. Macey and Schneider (2008a) present a visual
framework depicted in Figure 3 reflecting the facets of engagement and the interconnectivity between each one.

<table>
<thead>
<tr>
<th>Trait Engagement</th>
<th>State Engagement</th>
<th>Behavioral Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Positive views of life and work)</td>
<td>(Feelings of energy, absorption)</td>
<td>(Extra-role behavior)</td>
</tr>
<tr>
<td>Proactive Personality</td>
<td>Satisfaction (Affective)</td>
<td>Organizational Citizenship Behavior</td>
</tr>
<tr>
<td>Autotelic Personality</td>
<td>Involvement</td>
<td>Proactive/Personal Initiative</td>
</tr>
<tr>
<td>Trait Positive Affect</td>
<td>Commitment</td>
<td>Role Expansion</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>Empowerment</td>
<td>Adaptive</td>
</tr>
</tbody>
</table>

**Figure 3.** Employee engagement framework. The three facets of employee engagement are represented along a continuum and related to the elements impacting each (Macey & Schneider, 2008a, p. 6).

Towers Perrin (2009) present three dimensions of employee engagement: 1) rational, 2) emotional, and 3) motivational. The rational dimension explains how well the employee understands roles and responsibilities. The emotional dimension refers to how much passion the employee brings to work and to the organization. The motivational dimension reveals how willing the employee is to invest discretionary effort to perform a work role well.

Maslach and Leiter (1997) suggest the day to day issue for managers is to remove barriers to effective work and to develop an organizational environment providing
employees with increasingly effective support. The model presents the connection between work processes and structures and engagement with work by focusing on six key areas of organizational life: workload, control, reward, community, fairness, and values. The approach tackles the job-person mismatch leading to burnout and frustration from the perspective of the workplace rather than the worker by analyzing work characteristics management can control (Maslach & Leiter, 1997). Each of the six areas of organizational life contains the critical factors either causing burnout or offering solutions of good fit and engagement (Maslach & Leiter, 1997). By concentrating on the areas of mismatch causing the greatest problem and focusing on the ones with the greatest potential to lead change, management is proactively able to restore and maintain an engaged workforce. Once more, the role of community and support in the workplace is one of several areas central to engagement at work illustrated in Figure 4.

**Management Processes and Structures**
- Mission
- Central Management
- Supervision
- Communication
- Performance Appraisal
- Health and Safety

**Six Areas of Organizational Life**
- Workload
- Control
- Reward
- Community
- Fairness
- Values

**Engagement at Work**
- Energy
- Involvement
- Effectiveness

*Figure 4.* The Connection Between Processes and Structures and Engagement with Work (Maslach & Leiter, 1997, p. 104).
Another model critical to the understanding of engagement derives from research on the concept of burnout. Demerouti et al. (2001) present the JD-R (Job Demands-Job Resources) Model of Burnout to answer the question of what keeps people healthy and engaged even when experiencing heavy workloads. Since its initial presentation, studies on engagement employ the JD-R model as the theoretical framework more often than any other theory or model (Bakker et al., 2003b; Bakker et al., 2005b; Bakker & Leiter, 2010; Crawford et al., 2010). The JD-R model has also been used as a tool for human resource management and applied to over 130 different organizations in the Netherlands (Bakker et al., 2004). It is similar to the Job Characteristics Model in the link between job resources, work characteristics, and motivation. However, the JD-R model also investigates the roots of job stress and work motivation and suggests many demands and resources may influence employee well-being and motivation (Bakker et al., 2003b).
Figure 5. Job Demands-Resources Model of Burnout. Job demands lead to stress and exhaustion, and lack of job resources further leads to withdrawal behavior and disengagement (Demerouti et al., 2001, p. 502).

The model begins with job demands as the physical, psychological, social or organizational aspects of a job requiring sustained physical or psychological effort and having certain physiological or psychological costs (Schaufeli & Bakker, 2004). Job demands deplete energy reserves as an employee strives to meet perceived work demands and eventually leads to stress, frustration, and burnout (Crawford et al., 2010). Under the JD-R model, employees experiencing increased job demands may also adopt a passive coping response and disengage from the job altogether (Richardsen et al., 2006).

Another component of the JD-R model includes job resources. Job resources are physical, psychological, social, or organizational aspects of the job that reduce job demands. Job resources are helpful in achieving work goals and stimulating personal growth (Schaufeli & Bakker, 2004). Job resources can be organizational (e.g., salary,
career opportunities, job security), involve interpersonal and social relations (e.g., supervisor and coworker support, team climate), relate to the organization of work (e.g., role clarity, participation in decision making), and relate to the tasks an employee performs (e.g., performance feedback, skill variety, task significance, task identity, autonomy) (Bakker et al., 2003a; Bakker et al., 2004). Job resources can be extrinsic to the job (e.g., financial rewards, social support, and supervisor's coaching) and intrinsic to the job (e.g., autonomy, feedback, and professional development) (Bakker et al., 2003a; Bakker & Leiter, 2010). Job resources activate a motivational process whereby employees' needs for autonomy and competence are met and more willingness to dedicate efforts and abilities to work results in increased engagement (Bakker et al., 2003a; Crawford et al., 2010). Mauno, Kinnunen, and Ruokolainen (2007) find job resources as a better predictor of work engagement than job demands.

Demerouti et al. (2001) find job resources help employees manage a number of job demands including the stressors of workload, time pressures, and shift work. According to research findings, "disengagement is not an outcome of exhaustion but a shortage of job resources" (Demerouti et al., 2001, p. 508). Job resources have motivational potential and advance an employee toward meeting goals (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Engaged employees who are intrinsically motivated to meet work objectives create job resources (e.g., ask colleagues for help) as a way to achieve those objectives (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009a). Schaufeli and Bakker (2004) find engagement exclusively predicted by available job resources and, using structural equation modeling, identify engagement as a mediator of the relationship between job resources and turnover intentions (Bakker et al., 2003b). Working conditions involving high job demands and low job resources significantly add
to predicting the core dimensions of burnout (i.e., exhaustion and cynicism) (Bakker et al., 2005b).

Based on research findings, attention to and development of job resources can have a positive impact on engagement and lessen the potential of employee burnout. Bakker et al. (2003b) find job resources (i.e., social support, supervisory coaching, performance feedback, and time control) predict job involvement and relate to turnover intentions. Hakanen, Bakker, and Schaufeli (2006) present similar results. In a study of teachers, available job resources like job control, supervisory support, and innovativeness resulted in teachers feeling more vigorous and dedicated, engaged in their work, and experiencing stronger commitment to the job. Mauno et al. (2007) offer support for the JD-R model in a study involving antecedents of work engagement. Richman, Civian, Shannon, Hill, and Brennan (2008) suggest the amount of control employees have over work and the fit between work demands and employee resources relates to engagement and employee well-being. The researchers also propose flexibility and work-life policies as the best predictors of employee engagement. Koyuncu et al. (2006) find the level of control, rewards and recognition, and fit of personal and organizational values as essential work experiences and strong predictors of engagement.

The JD-R model proposes work characteristics may evoke two psychologically different processes: a stress process where high job demands lead to exhaustion and burnout and a motivational process where provision of job resources leads to engagement (Bakker et al., 2003a; Bakker et al., 2004; Crawford et al., 2010). In addition, even in situations where working conditions are difficult, demands can be offset by high job resources, which allow employees to manage work demands and remain engaged and productive (Bakker et al., 2004). When job demands such as work load, emotional
demands, and work-home conflicts are high, employees find it difficult to focus attention
and energy efficiently and this, in turn, affects productivity (Bakker et al., 2004).
Conversely, when job resources are available, the employee is able to go beyond personal
roles and engage in activities beneficial to the organization as a whole in exchange for the
availability of resources (Bakker et al., 2003a; Bakker et al., 2003b; Bakker et al., 2004;
Saks, 2011). The JD-R model suggests high job demands and a lack of job resources
form the "breeding ground for burnout and for reduced work engagement, respectively"
(Hakanen et al., 2006, p. 497). The JD-R model uses a balanced approach to explain the
negative (burnout) as well as the positive (work engagement) aspects of employee well-
being and concludes, irrespective of the occupation involved, job demands and job
resources evoke either a strain or a motivational process (Schaufeli et al., 2009).

Using the concepts of personal and job resources and building on the work of
Demerouti et al. (2001), Bakker and Demerouti (2008) propose a model of work
engagement and job performance prediction using the JD-R model as illustrated in Figure
6.
Figure 6. JD-R Model of Work Engagement. Job resources lead to work engagement and higher performance and gain motivational potential even when employees are confronted with high job demands. Personal resources can be independent predictors of work engagement and can be created when employees are engaged and perform well to create a positive gain spiral (Bakker & Demerouti, 2008, p. 218).

The models describing engagement provide different perspectives and nuances for consideration. Nevertheless, community, relationships, and workplace social support is a consistent theme throughout engagement theories and models. Other factors for consideration in this review include: behaviors of an engaged worker, drivers of engaged behavior, and the outcomes of engagement for the employee and the company.

Engagement Behaviors, Drivers, and Outcomes

Engagement research offers a number of specific descriptors of how an engaged employee behaves, the factors and work characteristics driving engagement, and the
outcomes, or benefits, of an engaged workforce. A review of the behaviors, drivers, and outcomes helps to emphasize the value of engagement for employees and companies.

**Behaviors.** An engaged employee exhibits a number of definable behaviors. The Utrecht Work Engagement Survey (Schaufeli et al., 2002; Schaufeli, Bakker, & Salanova, 2006) measures work engagement in three dimensions: behavioral, emotional, and cognitive. The three dimensions align with vigor, dedication, and absorption. Vigor, dedication and absorption are examples of the type of behaviors engaged employees exhibit in the workplace. Vigor is a high level of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence in the face of difficulties. Dedication is the sense of significance, enthusiasm, inspiration, pride, and challenge. Absorption is fully concentrating and being deeply engrossed in one's work whereby time passes quickly and the employee has difficulty in detaching from work (Seppala et al., 2009). The questions in the UWES measure the three dimensions.

Gallup's (2006) research suggests engaged employees perform at high levels, work with passion, are more productive and creative than others, are willing to learn and grow to meet customers' changing needs, and are adaptive to opportunities and challenges. Companies value such employee behavior as workplace engagement ensures competitiveness in the global business environment. A number of factors and work characteristics drive engaged employee behavior.

**Drivers.** An abundance of research exists on the drivers of engagement. Engagement drivers are consistent with research from the Work Characteristics Model (Hackman & Oldham, 1980) and the JD-R model (Demerouti et al., 2001) particularly in the area of job resources. Bakker (2011) describes drivers of work engagement in two categories: job resources and personal resources. Schaufeli and Bakker (2004) define job
resources as "physical, social, or organizational aspects of the job that may (a) reduce job demands and the associated physiological and psychological costs; (b) be functional in achieving work goals; or (c) stimulate personal growth, learning, and development" (p. 296). Job resource examples include: social support from colleagues, performance feedback, skill variety, autonomy, and learning opportunities. Job resources are the most beneficial in maintaining work engagement under conditions of high job demands (Bakker et al., 2008; Bakker, 2011).

A number of studies identify employee engagement drivers, or job resources (Attridge 2009; Hobeche & Springett, 2003). Supervisors have the opportunity to offer a number of job resources such as providing regular feedback focused on strengths and not weaknesses; providing praise and recognition; providing employee support and resources to perform tasks; designing meaningful tasks with a shared sense of purpose; and fostering opportunities for positive social relationships at work. Other resources fall under the control of the CEO, human resources, or upper management and include designing jobs and work environments which minimize stress and are ergonomically balanced; adding flexibility to work schedules and workloads; improving role clarity and decision-making authority; encouraging health and safety on the job; developing and communicating a compelling company vision, mission, goals, and objectives; creating ethical guidelines for decision making; assimilating new staff into the organization; promoting opportunities for employee growth and development; matching employees to jobs and tasks in alignment with abilities and talents; and focusing on transformational leadership which inspires, motivates, elevates, and offers intellectual challenges.

Other research finds many of the same drivers of engagement and includes managers developing supportive, trustworthy relationships with employees; encouraging
employees to solve work related problems; demonstrating integrity and concern for employees; managing with collaboration and empowerment; and designing jobs to minimize the cognitive, emotional, and physical strain on employees (Bates, 2004; May et al., 2004). Macey and Schneider (2008a) place emphasis on the importance of transformational leaders in facilitating state and behavioral engagement. Mastrangelo (2009) suggests employee engagement is driven by *micro level* elements such as personal growth, perceptions of supervisors, and performance feedback as well as *macro level* elements such as company leadership, honest communication, and belief in future company success.

Jacob et al. (2008) find six factors of workplace effectiveness positively and strongly relate to job engagement, job satisfaction, and employee retention. The six factors include:

1. Degree of job autonomy
2. Extent of learning opportunities
3. Extent of supervisory support
4. Extent of co-worker support
5. Extent of involvement in management decisions
6. Extent of workplace flexibility

Engagement is driven by a number of work characteristics, job resources, and personal resources. The role of support as a driver of engagement is confirmed in the review as well as in the 2012 Global Workforce Study on engagement by Towers Watson. The study states the drivers of sustainable engagement focus almost entirely on the culture and the relational aspects of the work experience. Understanding these drivers is the first step to ensuring positive engagement outcomes.
Outcomes. Finally, the impact of an engaged workforce on a company's bottom line is one of several reasons work engagement has received research attention. Research indicates engaged employees are more productive, safer, and healthier; increase company profitability; have higher levels of performance as individuals and at the unit level; have stronger customer relationships, positive job attitudes, less absenteeism, fewer defects or quality problems, and less turnover than less engaged employees (Bakker et al., 2005a; Coffman & Gonzalez-Molina, 2002; Gallup, 2006; Harter et al., 2002; Harter et al., 2009; Hoxsey, 2010; Lockwood, 2007; Rich et al., 2010; Saks, 2006; Schaufeli et al., 2008). A meta-analysis study by Gallup of the relationship between employee engagement and business outcomes suggests a workplace encouraging positive employee engagement is associated with beneficial business outcomes such as reduced employee turnover, customer satisfaction, employee productivity, and company profit (Harter, Schmidt, & Keyes, 2003). Specifically, when business units are compared across companies above the median on employee engagement to those below it, a business success rate advantage of 103% is identified (Harter, et al., 2002; Vance, 2006). After studying 40 global companies over 36 months, Towers Perrin (2009) finds companies with a highly engaged employee population turn in better financial performance than do low-engagement companies. This translates into a 5.75% difference in operating margins, a 3.44% difference in profit margins, and 9.3% higher shareholder returns than the returns for the S&P 500 Index from 2002 through 2006. Gallup (2011) reports companies with engaged employees have 3.9 times the earnings per share (EPS) growth rate compared to organizations with lower engagement in the same industry. Harter et al. (2009) reports, when comparing top quartile to bottom quartile engagement business units, significant median percentage differences include 60% in quality (defects), 49% in turnover for low-
Engagement has an impact on a company's bottom line. According to the Philadelphia-based Hay Group, 94% of the companies on Fortune's "Most Admired" list state employee engagement "created a competitive advantage" while 94% said it reduced turnover and 84% said it "strengthened customer relationships" (Shelly, 2010, p. 14). Fleming, Coffman, and Harter (2005) also report work groups with positively engaged employees have higher levels of profitability and productivity, better safety and attendance records, and higher levels of retention. Further, the researchers also estimate the cost of disengaged employees to U.S. companies at $300 billion per year in lost productivity.

Several company-specific examples of the outcomes of implementing employee engagement initiatives include:

- Caterpillar saves $8.8 million annually from decreased attrition, absenteeism, and overtime; a $2 million increase in profit and a 34% increase in highly satisfied customers (Vance, 2006).

- Molsom Coors Brewing Company saves over $1.7 million in safety costs; improved sales performance; and over $2.1 million decrease in performance related costs of low vs. high engagement teams (Vance, 2006).

- Richfield, Minnesota-based Best Buy, is able to connect employee survey scores to profits. If a store's engagement score increases by a tenth of a point (on a five-point scale), the store's profits will increase $100,000 for the year (Shelly, 2010).
Other benefits of an engaged workforce directly aid the employee. Engaged employees are less stressed, more satisfied with personal lives, use less health care, and take fewer sick days than those who are actively disengaged (Pitt-Catsouphes & Matz-Costa, 2008). Other research suggests engaged employees enjoy good mental health, report better perceived health, work in resourceful jobs with positive outcomes, and benefit from smooth social relationships (Schaufeli et al., 2008).

While researchers describe the outcomes of being an engaged worker, Bakker (2011) explains why engaged workers perform better than non-engaged co-workers:

1. Engaged employees often experience positive emotions (e.g., joy, enthusiasm) that seem to broaden people's thought-action repertoire and constantly work on personal resources.

2. Engaged employees experience better health and can focus skills and energy on work.

3. Engaged employees create their own job (i.e., job crafting) and personal resources.

4. Engaged employees transfer engagement (i.e., crossover) to others in their immediate environment.

In summary, engaged employees behave differently from other employees. An engaged employee is vigorous, dedicated, absorbed in work, a high work performer, committed, and adaptive. An engaged workforce provides positive outcomes beneficial to employees physically and emotionally and favorable to businesses in terms of productivity and profitability. Engagement drivers include inspiring and ethical leaders who communicate with employees and offer feedback, a supportive work environment and work relationships, flexible schedules and workloads, role clarity and accurate job
matches, decision making authority, and proper job design elements. The next section moves from the review of work engagement and focuses on the one job resource of social support, its theoretical foundation, connection to exchange ideology, and the relationship to work engagement.

Social Support

The JD-R model and other research studies offer a variety of job resources with the potential to impact work engagement, even in highly demanding and stressful jobs (Bakker et al., 2003b; Bakker et al., 2004; Demerouti et al., 2001; Hakanen et al., 2006; Koyuncu et al., 2006; Mauno et al., 2007; Richman, Crawford, Rodgers & Rogers, 2008; Schaufeli & Bakker, 2004; Xanthopoulou et al., 2007, 2009a). The job resource of social support is particularly relevant to the workplace today due to flatter organizational structures and increased team-based work requiring more frequent and meaningful lateral interactions (Chiaburu & Harrison, 2008). Lateral interactions force employees into increased interpersonal communications and reliance upon each other for information and resources to meet rising job demands. Feeling a part of the group and having coworkers provide the support needed to do a good job is inherent within interactions and is the basis for social support (Galinsky et al., 2004). Social support reflects the degree to which a job provides opportunities for advice and assistance from others (Morgeson & Humphrey, 2006). Bakker et al. (2005b), referring to the work of Cohen and Wills (1985), describes social support as a straightforward resource useful in achieving work goals while Susskind et al. (2003) define coworker support as "the extent to which employees believe their coworkers are willing to provide them with work-related assistance to aid in the execution of their service-based duties" (p. 181).
The workplace is a stressful environment for many employees. Support from colleagues helps to get work done in a timely manner and may alleviate and buffer the impact of workload on strain and burnout (Bakker et al., 2005b; Cohen & Wills, 1985). Social support is also able to protect employees from pathological consequences of stressful experiences (Bakker et al., 2005b). When employees lose a sense of positive connection with others in the workplace, become isolated, have impersonal contact, or experience chronic and unresolved conflict, this important area of work life suffers and burnout can result (Maslach et al., 2001). Bakker et al. (2005b) suggest social support is "probably the most well-known situational variable proposed as a potential buffer against job stress" (p. 171). Cohen and Wills (1985) propose social support's effect hinges on its value in promoting or supporting a positive sense of self and a belief that one can master or at least see themselves through stressful circumstances. For this reason and others, social support is critical for well being especially for stressful jobs or jobs which lack many motivational work characteristics (Ryan & Deci, 2001).

The role of relationships and support in the workplace is linked to early engagement research. Kahn (1990) identifies three psychological conditions influencing people to personally engage. The conditions are meaningfulness, safety, and availability (Kahn, 1990). The psychological condition of safety involves individuals feeling safe in organizational settings perceived as trustworthy, secure, predictable, and clear in terms of behavioral consequences (Rich et al., 2010). Psychological safety is experienced as a result of managerial support, supportive and trusting relationships with others in the organization, and control over work so an employee is comfortable taking risks, exposing their real selves, and trying new things without fear of negative consequences (Kahn, 1990).
The JD-R model recognizes social support as a job resource (Bakker et al., 2003a; Bakker et al., 2003b; Bakker et al., 2004; Demerouti et al., 2001; Humphrey et al., 2007; Maslach et al., 2001; Xanthopoulou et al., 2009a) and finds it predictive of work engagement (May et al., 2004; Richardsen et al., 2006; Schaufeli & Bakker, 2004). Other researchers also include social support in the study of antecedents of engagement. For example, May et al. (2004) confirm social support as a psychological condition influencing engagement and specifically identifies rewarding coworker and supportive supervisor relations as positive predictors of psychological safety. Bakker et al. (2004) also confirm social support as a job resource essential to managing high job demands and engaging in extra role behaviors. Sargent and Terry (2000) find high levels of co-worker support and non-work support under conditions of high strain are associated with better work performance. Bakker et al. (2003b) note social support is a job resource which predicts job involvement and relates to turnover intentions. Research by Richardsen et al. (2006) measures the degree to which coworkers and supervisors provide emotional support, recognition, practical assistance, and informational support and finds job resources are positively related to engagement. Viswesvaran, Sanchez, and Fisher (1998) find social support has a threefold effect on work stressor-strain relations. Specifically, social support reduces the strains experienced, mitigates perceived stressors, and moderates the stressor-strain relationship. Research also suggests having a friend at work that encourages coworker development, talks about work progress, and listens to opinions can improve a person's chance of being engaged by 54% (Coffman & Gonzalez-Molina, 2002). When employees are able to establish strong bonds through repeated relational exchanges, trusting relationships are built leading the parties to become more tolerant of perceived imbalances in their exchange relationships since imbalances can be quickly
eradicated in times of stress or disaster (Flynn, 2003; Gulati, 1995; Kollok, 1994; Willer, Lovaglia, & Markovsky, 1997).

In a different study of 1,000 American prisoners of war detained in a North Korean war camp, the psychological impact of negativity, self criticism, breaking loyalty, and withholding all social support had devastating results. Despite relatively minimal physical torture, the overall death rate of the North Korean POWs was 38%—the highest POW death rate in U.S. military history (Rath & Clifton, 2004). The authors found positive and regular recognition and praise impacts individuals in the workplace resulting in increased individual productivity, increased engagement among colleagues, increased intent to stay with an organization, higher loyalty and satisfaction scores from customers, and better safety records and fewer accidents on the job (Rath & Clifton, 2004). Specifically, individuals have an opportunity to "fill other people's buckets" by saying and doing things to increase positive emotions. When individuals choose to do this, there is an increase in positive emotions of others as well as an increase in personal positive emotions. A *full bucket* gives individuals a positive outlook, renewed energy, and increases strength and optimism (Rath & Clifton, 2004, p. 15).

Coffman and Gonzalez-Molina (2002) suggest having a best friend at work improves a person's chance of being engaged by 54%, while not having one reduces chances to zero. Having a friend at work allows individuals to manage stress better. When individuals are free to express feelings and not be penalized or ostracized for doing so, stress levels can lower. This result is similar to Kahn's (1990) psychological condition of safety: employees believe they will not suffer or receive negative consequences to self-image, status, or career for expressing their true selves at work.
Social support and a positive work environment are vital to an engaged workforce. According to Rath and Clifton (2004) "ninety nine out of a hundred people report they want to be around positive people and nine out of ten report being more productive when they're around positive people" (p. 47). Positive emotions buffer individuals against unfavorable health effects and depression and can enable faster recovery from pain, trauma, and illness (Rath and Clifton, 2004). Negative emotions in workplaces have the opposite effect. Recent discoveries suggest negative emotions can be harmful to health, may shorten life span, and can ruin workplaces, relationships, and families (Rath and Clifton, 2004).

The heart of social support is a work group functioning in a positive manner, praising each other generously, showing genuine concern and interest in the lives of co-workers, willingly helping and sharing information, listening and respecting each other, and including each other in discussions and critical decisions. Work groups operating in this manner are able to store up resources required for productivity when work demands and stress levels increase (Bakker et al., 2003b; Bakker et al., 2004; Bakker et al., 2005b; Bakker et al., 2006; Jacob et al., 2008; Karasek et al., 1998; May et al., 2004; Morgeson & Humphrey, 2006; Richardsen et al., 2006; Sargent & Terry, 2000; Schaufeli & Bakker, 2004; Settoon et al., 1996). Research continues to confirm the role of social support in reaffirming a person's membership in a group that shares praise, comfort, happiness and humor (Maslach et al., 2001). Affirmation fills the need for positive connection with others in the workplace and impacts work engagement (Maslach et al., 2001).

As studies discussed above indicate, social support is a job resource, related to engagement, and capable of impacting the level of employee stress within a demanding
workplace. To further understand social support's impact on work engagement, a discussion of Social Exchange Theory and exchange ideology follows.

Social Exchange Theory

The Social Exchange Theory (SET) is used in a variety of disciplines (e.g., anthropology, social psychology, and sociology) to explain workplace behavior, interpersonal relationships, organizational justice, and leadership (Cole et al., 2002; Cropanzano & Mitchell, 2005; Fleming, 2011; Roloff, 1981). Building on the minimax principal, SET assumes people seek to maximize benefits and minimize costs (Fleming, 2011; Roloff, 1981). The exchange process depends on the expectation of equitable resources in return for acts of another; social exchange involves a series of interactions that generate obligations (Blau, 1964; Emerson, 1976; Flynn, 2003). Expectation analysis is highly subjective because individuals place different values on resources exchanged (i.e., material goods, services). In addition, factors such as social status and frequency of exchange can impact the valuation process (Cole et al., 2002; Fleming, 2011; Flynn, 2003). Emerson (1976) credits four figures as primarily responsible for this theory which emerged in sociology and social psychology: Thibaut and Kelley (1959), Homans (1958), and Blau (1964).

Thibaut and Kelley (1959) use analytical matrices to attempt to quantify and calculate the friction of interdependence by visually comparing the choices available and the consequences of various behavioral combinations. In essence, the matrix seeks to quantify the value of different outcomes by evaluating the total potential benefits and potential costs; a cost benefit analysis and comparison of alternatives (Roloff, 1981). In order for this matrix quantification to work, individuals are assumed to accurately anticipate the payoffs of a variety of interactions (Roloff, 1981). In early exchanges
between individuals, voluntary continued association occurs only if the experienced outcomes are adequate (Thibaut & Kelley, 1959). The evaluation process to determine adequate outcomes involves a *comparison level* and the *comparison level for alternatives*. The comparison level is the standard by which the person evaluates the rewards and costs of a relationship or the level of satisfaction. The comparison level for alternatives is the standard the member uses in deciding whether to remain in or to leave the relationship; the "lowest level of outcomes a member will accept in the light of available alternative opportunities" (Thibaut & Kelley, 1959, p. 21). When rewards received equal or surpass the comparison level for alternatives, individuals usually feel satisfied with the exchange. If they are not satisfied, one individual may choose to exit the relationship and enter a new one (Fleming, 2011; Gamble & Gamble, 2010).

Throughout Thibaut and Kelley's (1959) analysis, an assumption is made that every individual voluntarily enters and stays in a relationship only when it is satisfactory in terms of rewards and costs. The rewards and costs include willingness and ability to provide rewards, value and attitude similarity, abilities, physical distance, and complementary needs (Thibaut & Kelley, 1959). The role of power and interdependency within exchange relationships is also discussed as individuals with more power are able to determine the course and pace of the interaction and insist upon receiving the better of the outcomes potentially available in the relationship (Thibaut & Kelley, 1959). Finally, Thibaut and Kelley (1959) explains the importance of norms (i.e., behavioral rules accepted by members of a dyad) in exchange relationships. When norms are effective, there can be a reduction in the costs of interaction, elimination of less rewarding activities from relationships, improvement in outcomes, and increase in interdependence (Thibaut & Kelley, 1959).
Homans (1961) relies on reinforcement principles from behaviorism to define social exchange as the exchange of activity, tangible or intangible, and more or less rewarding or costly behavior between at least two persons (Cook & Rice, 2003). In other words, behavior is a function of payoffs provided by the environment or other humans. In 1958, Homans offered:

Social behavior is an exchange of goods, material goods but also nonmaterial ones, such as the symbols of approval or prestige. Persons that give much to others try to get much from them, and persons that get much from others are under pressure to give much to them. This process of influence tends to work out at equilibrium to a balance in the exchanges. For a person in an exchange, what he gives may be a cost to him, just as what he gets may be a reward, and his behavior changes less as the differences of the two, profit, tends to a maximum. (p. 606)

Blau (1964) takes a more economic and utilitarian view of behavior than Homans' behaviorist analysis by suggesting individuals act in terms of anticipated rewards that are beneficial and tend to choose alternative actions that maximize benefits (Cook & Rice, 2003). According to Blau (1964), "Social exchange…refers to voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others" (p. 91). Blau (1964) also incorporates the idea of social exchange as a characteristic of relationships:

Social attraction is a force inducing human beings to establish social associations. Individuals are attracted to another if he expects associating with him to be in some way rewarding for himself, and his interest in the expected social rewards draws him to the other. A person who is attracted
to others is interested in proving himself attractive to them, for his ability to associate with them and reap the benefits expected from the association is contingent on finding him an attractive associate and thus wanting to interact with him. (p. 20)

The process of social attraction leads to social exchange. An individual who supplies rewarding services to another obligates him and, to discharge this obligation, the second must furnish benefits to the first individual in return (Blau, 1964). Blau suggests social exchanges differ from economic ones in several fundamental ways (Whitener et al., 1998). Social exchanges may involve extrinsic benefits with economic value (e.g., information or advice) or intrinsic benefits without any direct, objective economic utility (e.g., social support). Therefore, exchanges appearing to have little or unclear economic benefit can have a strong impact on the social dimension of a relationship (Whitener et al., 1998). Secondly, the benefit provided in social exchange is voluntary since the specific benefits are rarely determined beforehand or explicitly negotiated as often is the case in economic exchange. Finally, there is no guarantee the benefits will be reciprocated so relationships evolve slowly starting with exchanges of low value benefits and escalating as the parties show trustworthiness (Whitener et al., 1998).

In summary, Blau describes trust emerging through repeated exchange of benefits between two individuals through two means: the regular discharge of obligations by reciprocating for benefits received from others and through the gradual expansion of exchanges over time (Whitener et al., 1998). Only social exchange tends to create feelings of personal obligation, gratitude, and trust while purely economic exchange does not (Blau, 1964). Although Blau's theory was developed as a theory of social behavior, it
has been used as a framework for understanding social behavior in organizations (Ladd & Henry, 2000).

Flynn (2003) summarizes a variety of research presenting the benefits of the social exchange relationship for the organization and employees such as reduced conflict, improved performance, enhanced knowledge sharing among peer employees, increased affinity for employees, greater understanding of employee interests and values which leads to more pleasant and efficient pattern of exchanges, and increased trust and tolerance of imbalance in exchange relationships. Blau (1964) suggests resource exchange offers benefits for employees who are resource deficient to get necessary resources from co-workers by promising future reciprocation. This helps to ensure a smooth distribution of valued resources to places throughout the organization where the most needs are present (Flynn, 2003). The exchange process also helps parties to become partners and allies because trust has developed based on previous exchange experiences. As co-worker attachment increases, communication and cooperation is facilitated (Flynn, 2003).

Social Exchange Theory is highly reliant on reciprocity for the costs incurred by individuals within the exchange (Fleming, 2011). Understanding reciprocity is essential to fully comprehending the impact of social exchange within supportive coworker relationships.

Norm of Reciprocity

In order for Social Exchange Theory to operate successfully, the Norm of Reciprocity must be intact. Specifically, the expectation of exchange inherent to Social Exchange Theory is inextricably tied to the Norm of Reciprocity (Gouldner, 1960). Saks (2006) applies Social Exchange Theory to engagement by suggesting as individuals
experience a sense of obligation to their employers for benefits received, they respond with work effort and engagement. The Norm of Reciprocity further explains this sense of obligation as a generalized moral norm defining certain actions and obligations as repayments for benefits received. Reciprocity is more than just a pattern of exchange or a folk belief (Gouldner, 1960); it helps to shape the behaviors within relationships as well as strengthen relationships (Coyle-Shapiro & Neuman, 2004; Eisenberger et al., 2001). In interpersonal relationships, a partners' readiness to return favorable treatment is influenced by their acceptance and willingness to apply the reciprocity norm within a relationship (Eisenberger et al., 2001).

The Norm of Reciprocity makes "two interrelated minimal demands: people should help those who have helped them and people should not injure those who have helped them" (Gouldner, 1960, p. 171). Blau (1964) notes the most basic form of interaction is through mutual reciprocation and, because of the Norm of Reciprocity, "failure to discharge obligations results in group sanctions" (p. 92). Meeting obligations through reciprocity helps employees to maintain a positive self image of those who repay debts, avoid the social stigma and sanctions associated with those who violate the Norm of Reciprocity, and obtain favorable treatment from the organization (Eisenberger et al., 2001).

Just as the exchange relationship provides benefits to an organization and the individuals within it, the Norm of Reciprocity serves as a "plastic filler capable of being poured into the shifting crevices of social structures and serving as a kind of all purpose moral cement" (Gouldner, 1960, p. 175). While the concept may vary based on the status of the individual within society and across cultures, it still serves a "significant role as a system stabilizer" (Gouldner, 1960, p. 171). Along with this group stabilizing function,
the Norm of Reciprocity also serves as a starting mechanism helping to initiate social interactions especially in the early phases of relationships before customary duties have been established since this norm obliges the individual who first received the benefit to repay it at some time in the future (Blau, 1964; Gouldner, 1960).

In a study of social network analysis, the pattern and content of the interactions taking place within and between social units is analyzed. Granovetter (1973) defines social networks as sets of ties linking several individuals and defines tie strength as a function of three factors: frequency of contact, reciprocity of favors and obligations, and friendship (Nelson, 1989). Krackhardt and Stern (1988) suggest the distribution of friendship ties within organizations may influence work performance under crisis conditions. Specifically, the researchers suggest friendship ties link work units and improve organizational response to crises because only friendship ties are strong enough to overcome the forces dividing groups under the pressure of sudden, unexpected adversity (Nelson & Mathews, 1991). Considering the stressful and demanding workplace of today, this research adds to the importance of social ties, friendships, and support in the workplace as a resource for employees.

The Norm of Reciprocity is a vital element in understanding the social exchange process. It presents a moral norm that defines certain actions and obligations as repayments for benefits received (Gouldner, 1960). Emerging from the tenants of Social Exchange Theory and the Norm of Reciprocity is the exchange ideology of individuals involved in the exchange process.

Exchange Ideology

Workers vary in their adherence to and acceptance of the Norm of Reciprocity and, therefore, differ in the extent to which they reciprocate (Eisenberger et al., 1986,
This reciprocation difference is rooted in an individual's exchange ideology (Eisenberger et al., 1986; Scott & Colquitt, 2007). The interaction between an employer's behavior and an individual's exchange ideology shapes the degree to which the individual reciprocates with certain actions (Coyle-Shapiro & Neuman, 2004). Exchange ideology characterizes individual relationships with all entities with which they are involved including supervisors, employers, professional associations, and work groups (Redman & Snape, 2005).

Exchange ideology is a set of global beliefs that work effort should depend on treatment by the organization (Eisenberger et al., 1986). The essence of exchange ideology is the conditionality of effort (Pazy & Ganzach, 2009). Witt (1991b) describes exchange ideology as the relationship between what the individual receives and gives in an exchange relationship. Eisenberger et al. (1986) suggest an individual's increase in work effort comes from a greater effort-outcome expectancy, which "depends on an exchange ideology favoring the trade of work effort for material and symbolic benefits" (p. 501).

Individuals with a high exchange orientation strongly adhere to the Norm of Reciprocity and, therefore, carefully track obligations, keep score within interactions, expect direct and immediate giving, are sensitive and responsive to injustice and unfair treatment, monitor input and output closely in relationships, view exchange partners as debtors, limit knowledge sharing, and are more likely to perceive unfairness and to feel they are being taken advantage of within a relationship (Coyle-Shapiro & Neuman, 2004; Cropanzano & Mitchell, 2005; Eisenberger et al., 1986; Lin, 2007; Molm, Takahashi, & Peterson, 2003; Redman & Snape, 2005; Takeuchi, Yun, & Wong, 2011). Individuals with a low exchange orientation are less likely to care if exchanges are not reciprocated,
are more open minded and agreeable, and have a higher propensity to trust others (Cropanzano & Mitchell, 2005; Takeuchi et al., 2011). Individuals with high exchange ideology may view interactions as "It just is not fair," while individuals with low exchange ideology may view the same interactions as, "Life was never supposed to be fair, so what?" (Witt & Broach, 1991a, p. 102). In other words, individuals with a strong exchange orientation are more likely to return a good deed than those with a low exchange orientation (Cropanzano & Mitchell, 2005). Individuals with a low exchange ideology will "continue to work hard even if they perceive themselves to be poorly or unfairly treated" (Coyle-Shapiro & Neuman, 2004, p. 153; Witt & Broach, 1991a; Witt, 1991b). Therefore, a low exchange ideology suggests a contribution propensity relatively insensitive to variations in individual situations and is most likely shaped by personality or value orientation (Pazy & Ganzach, 2009). The extent to which individuals accept and apply the Norm of Reciprocity in regard to work effort is shown to differ in degrees and some suggest this difference may be due to individual factors (i.e., personality and dispositional variables) and cultural factors (Blakely, Andrews, & Moorman, 2005; Clark & Mills, 1979; Cropanzano & Mitchell, 2005; Eisenberger et al., 1986; Ladd & Henry, 2000; Shore & Coyle-Shapiro, 2003).

Research from Eisenberger et al. (1986) was the first to explore exchange ideology (Cropanzano & Mitchell, 2005). The research suggests the extent to which perceived organizational support increases an employee's affective attachment to the organization depends on the strength of the employee's exchange ideology (Eisenberger et al., 1986). In general, exchange ideology serves to intensify social exchange between employees and employers and thereby influencing employees' responsiveness to support (Eisenberger et al., 1986, 2001; Pazy & Ganzach, 2009). Exchange ideology's
moderating effects between variables essentially makes the relationship between two variables stronger or weaker depending on the degree of exchange ideology (Blakely et al., 2005; Coyle-Shapiro & Neuman, 2004; Eisenberger et al., 1986; Ladd & Henry, 2000; Witt & Broach, 1991a; Witt, 1991b).

Cropanzano and Mitchell (2005) describe a number of studies which analyze exchange ideology in relation to other variables such as organizational citizenship behavior, effort, performance, participative decision making, acceptance of group norms, satisfaction with promotion opportunities, satisfaction with training, effects of equal opportunity and attitudes, sensitivity to organizational politics, intent to stay with organizations, perceptions of income sufficiency, and employee attitudes.

Exchange ideology has been studied in relation to a number of factors but not specifically in relation to its role in affecting co-worker social support and employee engagement. Exchange ideology has utility "as an important individual difference variable in explaining and understanding social exchange relationships" (Takeuchi et al., 2011, p. 234). Understanding social exchange within the workplace, the influence of exchange ideology, and the effect on work engagement is the focus of this study. By studying the three elements simultaneously and integratively, the understanding of employee engagement is enhanced through the evaluation of exchange ideology and social support (Cole et al., 2002). This is particularly significant when considering the level of stress, burnout, and increased workload demands of today's workplace and the impact social support as a resource can have in managing those demands.

Summary

Today's workplace is challenging and filled with increasing demands. Business owners are under pressure due to globalization, changing technology, and economic
instability, and workers are reporting high levels of stress and burnout (American Psychological Association, 2009; Friedman, 2007; Godin, 2010; Maxon, 1999; Vance, 2006). The stressed worker experiences a number of physical, mental, and emotional problems resulting from continued stress which, in turn, impacts productivity and the profitability of the company for which they work (CareerBuilder, Inc., 2010; Centers for Disease Control and Prevention, 1999; Gallup, 2011; Jacob et al., 2008). Work related stress and burnout can ultimately result in workplace violence if not recognized and managed (Couto & Lawoko, 2011; Dickson, 1994; Johnson & Indvik, 1996; Sharif, 2000). This "health epidemic of the 21st century" is estimated to cost business over $300 billion a year and impacts employer and employee alike (ComPsych, 2010).

While the focus of psychology has been on negative states, there is a shift to studies of human strengths and optimal functioning – a more positive psychology perspective (Luthans & Youssef, 2007; Maslach et al., 2001, p. 416). The study of engagement as the antithesis of burnout allows researchers to consider the positive and promises an avenue contributing to understanding employees' well-being and motivations (Maslach et al., 2001). While there is promise in the area of engagement research, reports of current levels of work engagement are low. In 2005, the Gallup Management Journal reported 71% of the workforce is either not engaged or actively disengaged (Thackray, 2005). Gallup calculated the cost to the US economy of actively disengaged employees is in the range of $254 to $363 billion annually (Coffman & Gonzalez-Molina, 2002).

A common thread connecting the two issues of work stress and work engagement is the job resource of coworker social support. A support network of friends and coworkers is a situational factor effective in reducing the effects of stressful working
conditions (Centers for Disease Control and Prevention, 1999). Coworker social support is also an identified job resource in the JD-R model successful in managing high job demands and impacting work engagement (Bakker et al., 2003b; Bakker et al., 2004; Bakker et al., 2005b; Bakker et al., 2006; Jacob et al., 2008; Karasek et al., 1998; May et al., 2004; Morgeson & Humphrey, 2006; Richardsen et al., 2006; Sargent & Terry, 2000; Schaufeli & Bakker, 2004; Settoon et al., 1996). Understanding the role of exchange ideology in the relationship between work engagement and coworker social support is the central premise of this research.

While much has been written about the relationship of social support and work engagement, little has been documented about the variables affecting support levels and how the variables might relate to overall work engagement. Rich et al. (2010) recommend further research into the development and testing of theory regarding how engagement fits into other theories of motivation (Kanfer, 1990). The current study presents Social Exchange Theory and exchange ideology in response to this recommendation.

In addition, past studies emphasize the supervisory and employee relationship or the employee's perceptions of the organization. The need exists to consider a less hierarchical exchange relationship, the one between peer employees (Cole et al., 2002; Flynn, 2003; Flynn & Brockner, 2003; Organ & Paine, 1999). Combine this with the trend in today's workplace to increase employee involvement and the use of more team-based structures to complete assignments, and it is valuable to examine the coworker relationship connection to work engagement (Flynn, 2003; Gamble & Gamble, 2010; Mohrman et al., 1995; Noe et al., 2009).
The current study will build on existing research and theory related to engagement and social exchange, determine the relationship between coworker social support, work engagement, and exchange ideology, and the influence of exchange ideology on these variables. The analysis is useful to employees and supervisors in adapting communication styles to the exchange ideologies of the workers in organizations and providing interaction opportunities conducive to social support (Humphrey et al., 2007; Morgeson & Humphrey, 2006; Witt, 1991b).

The following chapter will present the research design and objectives, population, data collection instruments, validity and reliability of the instruments, data collection plan, and data analysis plan used for the study.
CHAPTER III
RESEARCH DESIGN AND METHODOLOGY

Introduction

The current study examined the relationship between employee perceptions of three variables: work engagement, coworker social support, and individual exchange ideology. Specifically, the study investigated the relationship between work engagement, coworker social support, and exchange ideology and the influence of exchange ideology on the relationship between work engagement and coworker social support. Survey data was collected from employees working for a small utility company located in the Southeastern United States at one point in time.

Lack of work engagement impacts key business factors such as productivity, profitability, quality, absenteeism, and quality (Harter et al., 2009). Coworker social support is one of a number of job resources shown to impact engagement (May et al., 2004; Richardsen et al., 2006; Schaufeli & Bakker, 2004). The current study investigated employee perceptions of the potential of one variable, exchange ideology, to influence the relationship between coworker social support and work engagement. The study also determined if a relationship exists between exchange ideology, coworker support, and work engagement, as perceived by members of the population. The research design, research objectives, instrument validity and reliability, research setting and participants, data collection efforts, procedure and data analysis plan are described in the chapter.

Research Design

A cross sectional, non-experimental, descriptive research design was used to collect employee perceptions on three variables: work engagement, coworker social support, and individual exchange ideology. The data was studied to determine
relationships between variables. The study used a cross sectional research design as one survey was administered during a limited time period to employees at two different public utility locations. Belli (2009) describes cross sectional research data as "collected at one point in time, often in order to make comparisons across different types of respondents or participants" (p. 66). The cross sectional research is non-experimental since the variables are not manipulated by the researcher but are, instead, studied as they exist when they are collected (Belli, 2009). Finally, the study was descriptive since the "primary focus for the research is to describe some phenomenon or to document its characteristics" (Belli, 2009, p. 65). While research has been conducted on work engagement and the job resource of coworker social support, no research was found on the influence of exchange ideology on the two variables and the relationship between them. Therefore, the current study determined if a perceived relationship exists between the variables and sought to understand the influence of exchange ideology on the variables.

To investigate the relationships between the three variables in the study, a paper-based survey was used to collect data. The survey was comprised of questions on participant levels of work engagement, coworker social support, and exchange ideology and also includes three demographic questions. The reliability and validity of the items are discussed later in the chapter.

Research Objectives

**RO 1**: Describe the demographic characteristics of sample participants.

**RO 2**: Determine the relationship between coworker social support and work engagement.
RO 3: Determine the relationship between exchange ideology and coworker social support.

RO 4: Determine the relationship between exchange ideology and work engagement.

RO 5: Determine the influence of individual exchange ideology on the coworker social support and work engagement relationship.

Population

A review of participant occupations within work engagement research samples reveals a large variety of professions. Kahn's (1990) early research with such varied participants as camp counselors and architectural firm employees marks the beginning of a continuing trend to collect engagement data from professions across the occupational spectrum. Indeed, Warr (1990) suggests including a broad range of job positions to test relationships between job characteristics (i.e., autonomy, task identity, feedback) and outcomes (i.e., work engagement). Bakker et al. (2003a) affirm the presence of specific risk factors regarding burnout, the antipode of work engagement, in every occupation. The assumption within the JD-R model of such risk factors across occupations creates an "overarching model that may be applied to various occupational settings irrespective of the particular demands and resources involved" (Bakker et al., 2003a, p. 19). In an informal review of over 30 research studies involving work engagement, participants from an assortment of occupations were included. The occupations range from healthcare, law enforcement, social services, education, medical, office and administrative, child care, construction, transportation, public service, manufacturing, engineering, insurance, information systems, transportation, non-profit, pharmaceutical, finance, sales, consulting, food service, and banking. Schaufeli and Bakker (2003)
present fifteen different occupational groups in the international database of work engagement results in the UWES Manual. Schaufeli et al. (2008) recommend additional work engagement research involving heterogeneous samples of employees holding various types of jobs as this helps increase the generalizability of the results. In the current study, a variety of jobs were studied, allowing a greater understanding of the work engagement construct and the factors impacting work engagement across professions.

For the current study, the population included all full time workers at two different locations of a community-based utility company providing electric, water, wastewater, gas, and cable services who worked at least one year for the utility. The study employed a non probability sample based on convenience. The sample provided an opportunity to evaluate perceptions of employees in the same jobs at two different locations over a broad spectrum of occupations. Despite the different utility services offered and the range of occupations within the population, there is considerable interaction and communication between departments and personnel as customer service operations impact services provided or suspended, many times for the same customer across multiple utilities. Cashier, customer service, information technology, and operational and technical staff communicate daily regarding work orders and customer issues. Supervisors and managers travel to both company locations weekly to address matters, meet with staff, provide direction, and evaluate project progress. When storms or other major disruptions of utility service occur, operational and support staff travel between locations to provide additional support and assistance to decrease length of service interruptions. Finally, the nature of utility work involves considerable safety hazards particularly in working with electricity, wastewater, and gas operations. All of
the factors emphasize the importance of coworker social support for effective, efficient, and safe operations.

The current study surveyed employees at two locations within 28 miles of each other. In total, there are approximately 225 employees; 160 employees assigned to location one and 65 employees assigned to location two. Location one is the primary site offering a full range of utility services and housing all administrative support staff (i.e., Accounting, Information Technology, Human Resources, Management, and Transportation). Location two offers only electric service, engineering support, and customer service. The employees at both locations operate under the same policies and procedures with the primary difference being a more limited utility service offering at location two. Surveying employees at both locations provided an opportunity to analyze the data in a more detailed manner with consideration for impacts of location on the variables in question.

While most positions work a typical day shift (8:00 a.m.-5:00 p.m.), several groups of employees are required to work longer shifts, standby shifts, and cover 24 hour shifts to ensure response to customer inquiries and outages. The occupations range from hourly, blue collar positions requiring minimal formal education to experienced and credentialed management level accountants and engineers. The participants' ages vary from 20-66 years. The characteristics of the sample, the variety of occupations represented, the overlap and dependency on coworkers to operate effectively and safely, and the prospect of sampling the same positions working for the same company at two locations makes the sample appropriate for the current study's purposes. Table 1 below provides a breakdown of the range of occupations at both locations.
Table 1

Sample Occupations, Potential Participants, and Location

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of Employees</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial</td>
<td>6</td>
<td>One and Two</td>
</tr>
<tr>
<td>Supervisory</td>
<td>29</td>
<td>One and Two</td>
</tr>
<tr>
<td>Professional</td>
<td>11</td>
<td>One and Two</td>
</tr>
<tr>
<td>Customer Service</td>
<td>19</td>
<td>One and Two</td>
</tr>
<tr>
<td>Technical</td>
<td>50</td>
<td>One and Two</td>
</tr>
<tr>
<td>Operations</td>
<td>92</td>
<td>One and Two</td>
</tr>
<tr>
<td>Information Technology</td>
<td>6</td>
<td>One</td>
</tr>
<tr>
<td>Administrative Support</td>
<td>12</td>
<td>One and Two</td>
</tr>
</tbody>
</table>

In order to participate in the survey, the following criteria were established: participants must have worked for the employer for at least one year and be employed full-time. Out of the 225 employees, this eliminated approximately 12 from the sample. The criteria were necessary to ensure participants had sufficient opportunity to not only learn their job and determine their own engagement levels relative to their work but also allow enough time for participants to interact with other coworkers to obtain advice and assistance and experience levels of coworker social support. These inclusion and exclusion criteria provided an efficient way to focus the survey on individuals who are best equipped to give the most accurate information concerning the three variables of work engagement, coworker social support, and exchange ideology (Fink, 2003c).

Given the population size of 210 and to ensure a 95% confidence interval with a 5% margin of error, the recommended sample size of completed surveys was 137. The sample size estimate was determined using a sample size calculator (Raosoft, 2004).
Instrumentation Considerations

Engagement has been studied by a number of researchers and resulted in numerous definitions, models, and data collection instruments. While coworker social support and exchange ideology have not been studied to the same extent, the two concepts have been measured using varied data collection instruments. The following section provides an overview of the data collection instruments used in a range of studies focused on the concepts of work engagement, coworker social support, and exchange ideology. In addition, an explanation of the instruments selected for the current study is provided.

Measures of Engagement. Harter et al. (2002) agree with Kahn's perspective of employee engagement; employees are engaged when emotionally connected to others and cognitively vigilant. Harter et al. (2002) delineates the explanation even further by suggesting employees are engaged when they are emotionally and cognitively engaged and know what is expected; have what they need to complete their work; perceive they are part of something significant with coworkers whom they trust; and have chances to improve and develop. The four categories Harter et al. (2002) describe translate into 12 questions within a measurement tool called the Q12 or Gallup Workplace Audit (GWA). With over 30 years of qualitative and quantitative research, the twelve question survey identifies strong feelings (or drivers) of employee engagement and each question is linked through extensive research to one of four business outcomes: productivity, profitability, retention, and customer satisfaction (Buckingham & Coffman, 1999; Harter et al., 2009). The final wording and order of the questions was completed in 1998 and the Q12 has been administered to more than 15 million employees in 169 different countries and 65 languages (Harter et al., 2009). The Q12 places people into one of three
categories: engaged, not engaged, and actively disengaged with Gallup reporting 28% as engaged and the remaining 72% as either not engaged or actively disengaged (Thackray, 2001). The Q12 is one of the most popular engagement measures, especially in the consulting industry (Jeung, 2011). The Q12 is proprietary and may not be used without permission.

WFD Consulting, a company providing a solution-focused perspective on the people issues that impact business, offers a proprietary employee engagement index described in a validation study by Richman et al. (1998). The engagement index is a statistically valid and predictive measurement of employee engagement uncovering seven drivers (i.e., communication, diversity and inclusion, job satisfaction, flexibility, manager effectiveness, work-life support, career advancement) said to influence the growth or decline of engagement in a company (WFD Consulting, n.d.). The engagement index is based on the construct of organizational commitment and captures three elements of engagement: affective commitment, discretionary effort, and alignment with the organization's goals (Civian, Richman, Shannon, Shulkin, & Brennan, 2008). After collecting engagement measures from employees and analyzing the engagement drivers, a company receives an engagement profile from which intervention strategies can be developed (WFD Consulting, n.d.).

The Utrecht Work Engagement Survey (UWES) takes a different approach in the measurement of engagement. The UWES measures the employee's state of engagement, not work characteristics or engagement drivers (Macey & Schneider, 2008b). The UWES uses nine, fifteen, and seventeen questions to measure three engagement dimensions: persistence (absorption), enthusiasm (dedication), and energy (vigor) (Bakker & Demerouti, 2008; Schaufeli et al., 2002; Schaufeli et al., 2006). The UWES is
the most widely used engagement instrument not only in burnout and stress studies but overall human resources and organizational research (Jeung, 2011). The UWES is validated in several countries including China, Finland, Greece, Spain, The Netherlands, and South Africa (Bakker & Demerouti, 2008).

With the UWES instrument, individuals rate how frequently they experience work engagement during a work day using a seven point Likert response format. The participants select a rating for each question ranging from zero (0, never) to six (6, always, every day) to describe their level of work engagement. The UWES measures work engagement as absorption, dedication, and vigor and is free for noncommercial scientific research, used only for commercial and/or non-scientific use with written permission.

Engagement is defined and measured in different ways and with different approaches. The current study focuses on identifying the current level of engagement in the workplace and its relationship to social support and exchange ideology. The UWES provides a clear and compelling assessment of engagement levels, not drivers, at one point in time. With permission from the author, the UWES is the measurement instrument used for the current study.

**Measures of Social Support.** Social support reflects the degree to which a job provides opportunities for advisement and assistance from others (Morgeson & Humphrey, 2006). Bakker et al. (2004) measure the relationship between several job characteristics (one of which was social support) to burnout and performance. To measure the level of social support, three items of the scale developed by Van Veldhoven and Meijman (1994) were used. Example questions are "Can you ask your colleagues for help if necessary?" and "Can you count on your colleagues when you face difficulties at
work?" (Bakker et al. 2004, p. 91). Schaufeli et al. (2004) use the same scale to measure social support as a job resource and the relationship to burnout and engagement.

Sargent and Terry (2000) study the extent to which different sources of social support, work overload, and task control influence job satisfaction, depersonalization, and supervisor assessments of work performance. The measurements include the perceived availability of support for work-related problems from the participant's immediate supervisor, other people at work, their partner, other family members, and friends. The one social support question provided in the article is "How much can you count on these people to help you feel better when you experience work-related problems?" (Sargent & Terry, 2000, p. 249).

Bakker et al. (2003b) present a series of questions used in several studies involving crossover of burnout and engagement, the predictive validity of the JD-R model for absenteeism and turnover, the role of job resources in buffering the impact of job demands on burnout, and reciprocal relationships between job resources, personal resources, and work engagement (Bakker et al., 2005b; Bakker et al., 2006; Xanthopoulou et al., 2009a). The only social support question published in the article is "Can you ask your colleagues for help if necessary?"

Morgeson and Humphrey (2006) offer a work design questionnaire (WDQ) integrating a number of work characteristics (i.e., task characteristics, knowledge characteristics, social characteristics, and contextual characteristics) to measure and assess job design and the nature of work. Social support is one of the work characteristics measured in the WDQ and the questions include

1. I have the opportunity to develop close friendships in my job.

2. I have the chance in my job to get to know other people.
3. I have the opportunity to meet with others in my work.

4. My supervisor is concerned about the welfare of the people that work for him/her.

5. People I work with take a personal interest in me.

6. People I work with are friendly (Morgeson & Humphrey, 2006, p. 1338).

Jacob et al. (2008) use three questions to measure coworker team support for job success drawn from previous Family and Work Institute research projects:

1. I feel I am part of the group I work with (Galinsky, Bond, & Friedman, 1993).

2. I have the support from my coworkers that I need to do a good job (Galinsky et al., 2004).

3. I have the support from my coworkers that I need to manage work/family life (Galinsky et al., 2004).

May et al. (2004) explore the effects of three psychological conditions on employees' work engagement. One of the conditions includes rewarding coworker relations. The questions measuring coworker relations include

1. My interactions with my coworkers are rewarding.

2. My coworkers value my input.

3. My coworkers listen to what I have to say.

4. My coworkers really know who I am.

5. I believe that my coworkers appreciate who I am.

6. I sense a real connection with my coworkers.

7. My coworkers and I have mutual respect for one another.

8. I feel a real kinship with my coworkers.

9. I feel worthwhile when I am around my coworkers.
10. I trust my coworkers (May et al., 2004, p. 37).

Richardsen et al. (2006) measure several job resources including social support from coworkers by using items from Himle, Jayaratne, and Thyness (1991, p. 23) to assess the degree to which coworkers provide emotional support, recognition, practical assistance, and information support. The questions include

1. How true is it that your coworkers are warm and friendly when you have problems?
2. How true is it that your coworkers show approval when you have done well?
3. How true is it that your coworkers help you complete a difficult task?
4. How true is it that your coworkers give information when you need it?

Ladd and Henry (2000) use nine questions originally developed by Eisenberger et al. (1986) to measure perceived organizational support. The questions are revised to measure perceived coworker support. The questions are designed to determine if support perceptions predict organizational and individual citizenship behavior and if exchange ideology would moderate the relationship.

1. My coworkers are supportive of my goals and values.
2. Help is available from my coworkers when I have a problem.
3. My coworkers really care about my well-being.
4. My coworkers are willing to offer assistance to help me perform my job to the best of my ability.
5. Even if I did the best job possible, my coworkers would fail to notice.
6. My coworkers care about my general satisfaction at work.
7. My coworkers show very little concern for me.
8. My coworkers care about my opinions.

The summary of social support questions from a variety of studies provides insight into the behaviors and perceptions of socially supportive coworkers including coworkers are respectful of each other, care for and share connections with each other, listen and appreciate the input of each other, and can be counted on for help and information. Social Exchange Theory provides a possible explanation of why individuals respond differently to workplace support and the connection of support to work dedication, absorption, and vigor (i.e., work engagement) (Saks, 2006).

With permission from the author, the current study used the perceived organizational support questions developed by Eisenberger et al. (1986) and later revised by Ladd and Henry (2000) to reflect coworker social support (Appendix B). The Ladd and Henry (2000) questions are behaviorally based and place less emphasis on friendship descriptors as compared to the survey questions developed by Morgeson and Humphrey (2006), May et al. (2004), and Richardsen et al. (2006). The questions include both positive and negatively worded statements as a logic and validity check and use a seven point Likert response format (Carifio & Perla, 2007).

Measures of Exchange Ideology. Eisenberger et al. (1986) present a five item set of Likert-type exchange ideology questions to test the effects of perceived support on absenteeism and whether it is effected by the strength of an employee's exchange ideology. The questions measure the strength of an employee's belief that work effort should depend on treatment by the organization. Coyle-Shapiro and Neuman (2004) use the same questions to study exchange and creditor ideologies and moderating effects on the psychological contract. Witt (1991b) uses these questions and finds exchange
ideology moderates the relationships between ratings of organizational citizenship behaviors and organizational support. Witt and Broach (1991a) uses the questions in another study and finds perceptions of procedural justice account for greater variance in satisfaction among trainees with a strong exchange ideology than among individuals with a weak exchange ideology. Scott and Colquitt (2007) employ the Eisenberger et al. (1986) exchange ideology questions to assess whether individuals should act in beneficial ways toward the organization. Witt, Kacmar, and Andrews (2001) use the exchange ideology questions to test the interactive effects of procedural justice and exchange ideology. Takeuchi et al., (2011) test the social influence of a coworker by considering the effect of employee and coworker exchange ideologies on employees' exchange qualities. Sinclair and Tetrick (1995) revise the exchange ideology questions in relation to treatment by unions to test the contribution of members' perceptions of union support and instrumentality as a predictor of union commitment. Redman and Snape (2005) also modify the exchange ideology questions to measure the relationship between perceived union support, union commitment, union citizenship behaviors, and intention to quit or switch unions. Pazy and Ganzach (2009) examine the effects of exchange ideology, pre-entry perceived organizational support, and the interaction on initial and long term committed behavior. The results indicate exchange ideology affects initial and long term committed behavior.

The Eisenberger et al. (1986) exchange ideology questions include

1. An employee's work effort should depend partly on how well the organization deals with his or her desires and concerns.

2. An employee who is treated badly by the organization should lower his or her work effort.
3. How hard an employee works should not be affected by how well the organization treats him or her.

4. An employee's work effort should have nothing to do with the fairness of his or her pay.

5. The failure of the organization to appreciate an employee's contribution should not affect how hard he or she works. (p. 503)

Ladd and Henry (2000) revise the Eisenberger et al. (1986) exchange ideology questions to assess the strength of an employee's belief that work effort should depend on treatment by coworkers. They find a significant moderating effect of organizational exchange ideology on the relationship between perceived organizational support and organizational citizenship behaviors but do not find a moderating effect of individual exchange ideology on coworker targeted citizenship. Ladd and Henry's (2000) revised questions are

1. Your willingness to help your coworkers should depend partly on their behavior toward you.

2. An employee who is treated badly by his/her coworkers should reduce how much he/she does for them.

3. How much you help your coworkers should not depend on how they treat you.

4. An employee's effort to assist his/her coworkers should have nothing to do with how much they assist him or her.

5. The failure of your coworkers to appreciate your assistance should not reduce your willingness to offer help. (p. 2049)

The original exchange ideology questions developed by Eisenberger et al. (1986) relate to an individual's exchange ideology in relationship to the organization. Using a
social exchange based view, the questions measure how perceptions of organizational support might impact work behavior (Sinclair & Tetrick, 1995). However, for the purposes of the current study, understanding and measuring an individual's exchange ideology and its influence on the relationship between coworker social support and engagement is a slightly different perspective than previous studies. Using the revised Eisenberger et al. (1986) questions developed by Ladd and Henry (2000) to measure exchange ideology toward coworkers is relevant for the current study. The decision to use the questions is based on several factors. The questions include both positive and negatively worded statements as a logic and validity check and use a seven point Likert response format (Carifio & Perla, 2007). The exchange ideology survey questions were published by Ladd and Henry (2000) in the journal article, statistical analysis of the questions are provided within the article, and the questions are slightly reworded from the original questions developed by Eisenberger et al. (1986) and used in multiple studies by other researchers (e.g., Coyle-Shapiro & Neuman, 2004; Scott & Colquitt, 2007; Witt, 1991b; Witt et al., 2001).

Measures of work engagement, social support, and exchange ideology have been described in this section. A review of research studies using the measures, the purpose and results of the studies as well as the types of questions used provides a framework for understanding the reasoning for the selection of the current study's specific instruments. To measure work engagement, the Utrecht Work Engagement Scale was used. To measure coworker social support and exchange ideology, the questions developed by Eisenberger et al. (1986) and later revised by Ladd and Henry (2000) were used. With these specific instruments in mind, an examination of validity and reliability is provided.
Validity and Reliability of the Instruments

*Work Engagement.* Since its introduction in 2002, the UWES has become the most widely used engagement instrument and has been validated internationally (Bakker & Demerouti, 2008; Jeung, 2011). The UWES measures levels of three factors: vigor, dedication, and absorption. After careful study and research, confirmatory factor analysis of the UWES show the fit of the hypothesized three-factor structure to the data is superior to alternative factor models (Bakker & Demerouti, 2008; Schaufeli et al., 2002). Although the three factors of vigor, dedication, and absorption are highly correlated (from .83 to .97), the data fits better with the correlated three-factor structure (Seppala et al., 2009).

Scores on the UWES are "relatively stable over time with two year stability coefficients for vigor, dedication, and absorption at .30, .36, and .46, respectively" (Schaufeli & Bakker, 2003, p. 7). Schaufeli and Bakker (2003) present the Cronbach's $\alpha$ for the various versions of the UWES; the 9, 15 and 17 question survey versions are presented in Table 2. Cronbach's alpha is "the average value of the reliability coefficients one would obtain for all possible combinations of items when split into two half-tests" (Gliem & Gliem, 2003, p. 84). The closer Cronbach's alpha is to 1.0, the greater the internal consistency of the items in the scale (Gliem & Gliem, 2003). The analysis of reliability must use summated scales and not individual items as Cronbach's alpha does not provide reliability estimates for single items (Gliem & Gliem, 2003). The internal consistencies are good for the short and longer versions of the UWES as seen in Table 2 and are well above the criterion of .70 recommended for newly developed measurement instruments (Nunnaly & Bernstein, 1994; Schaufeli & Bakker, 2003). Combining all of the UWES psychometric analyses together, engagement can be described as a construct...
consisting of three closely related aspects, measured by three internally consistent scales and valid cross-nationally (Schaufeli & Bakker, 2003; Bakker & Demerouti, 2008).

Table 2

**Utrecht Work Engagement Survey Cronbach's α**

<table>
<thead>
<tr>
<th></th>
<th>UWES-9 (N=9,679)</th>
<th></th>
<th>UWES-15 (N=9,679)</th>
<th></th>
<th>UWES-17 (N=2,313)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Md</td>
<td>Range</td>
<td>Total</td>
<td>Md</td>
</tr>
<tr>
<td>Vigor</td>
<td>.84</td>
<td>.84</td>
<td>.75-.91</td>
<td>.86</td>
<td>.86</td>
</tr>
<tr>
<td>Dedication</td>
<td>.89</td>
<td>.89</td>
<td>.83-.93</td>
<td>.92</td>
<td>.91</td>
</tr>
<tr>
<td>Absorption</td>
<td>.79</td>
<td>.79</td>
<td>.70-.84</td>
<td>.82</td>
<td>.81</td>
</tr>
</tbody>
</table>


The 9-item version of the UWES is recommended as the correlated three-factor structure remains relatively unchanged across samples and time as reported by Seppala et al. (2009). The shorter version is "also preferable for practical reasons-to reduce the likelihood of attrition a scale measuring a particular construct should have as few items as possible while remaining reliable and valid" (Seppala et al., 2009, p. 477). Using a shorter version is particularly important considering the current study's participants were also asked to rate additional statements on coworker social support and exchange ideology, further adding to the length of the survey instrument. The UWES-9 is a "sound measure of work engagement and is recommended in future research on occupational well-being" (Seppala et al., 2009, p. 479). For these reasons, the UWES-9 was selected to measure work engagement in the current study and can be found in Appendix A.
Coworker Social Support. Eisenberger et al. (1986) developed a series of questions to measure perceived organizational support with 36 questions and a 7 point Likert rating scale. The reliability coefficient is .97 with item-total correlations ranging from .42-.83. Based on Eisenberger et al. (1986) analysis, each of the 36 items demonstrates strong loading on the main factor with minimal evidence for the existence of other factors.

In 1990, Eisenberger, Fasolo, and Davis-Lamastro created a shorter form to measure perceived organizational support with a 17 and 9 item survey and a 7 point Likert scale. Alphas of the questions differ from .95 to .58 between different occupational groups used in the study. In a review of the literature on perceived organizational support, Rhoades and Eisenberger (2002) report "exploratory and confirmatory factor analysis with employees from diverse occupations and organizations provide evidence for the high internal reliability and uni-dimensionality of Eisenberger et al.'s scale in the original 36 item form and subsequent shorter versions" (p. 699).

Pazy and Ganzach (2009) adapt 7 items from the original perceived organizational support questionnaire by Eisenberger et al. (1986) for army soldiers and report an internal reliability of .80. Ladd and Henry (2000) revise the nine-item survey of perceived organizational support by Eisenberger et al. (1986) with a target of coworkers instead of the organization. Pre-testing the revised support questions results in a coefficient alpha of .94 and .92 for the research sample. The researchers also note moderate positive correlations between the original perceived organizational support scale and the perceived coworker support scale but state sufficient divergence to be considered distinct (Ladd and Henry, 2000). The reported factor loadings for the coworker support scales paired with the organization focused support scale range from
This combined with the high alpha of .92 in the Ladd and Henry (2000) study are "encouraging with respect to the future use of the scales" (p. 2040).

Based on the statistical characteristics presented, the nature of the questions and rating format, and the focus of the current study on the coworker relationship, perceived support from coworkers, and work engagement, the questions designed by Eisenberger et al. (1986) and Ladd and Henry (2000) were used for the current study.

*Exchange Ideology.* Eisenberger et al. (1986) present a 5 item Likert-type set of questions to measure exchange ideology (EI)—the strength of an employee's belief of work effort should depend on treatment by the organization. The factor analysis on the 5 questions reveals a factor loading of between .60 to .80 with Cronbach's alpha of .80. Witt et al. (2001) use the Eisenberger et al. (1986) EI scale to measure exchange ideology and find an internal consistency estimate of .71 while Scott and Colquitt (2007) find an alpha of .69. Pazy and Ganzach (2009) adapt the Eisenberger et al. (1986) EI questions for use in measuring a soldier's effort based on treatment by the army and report internal reliability of the EI questions of .79. Similar results of .76 for internal consistency (Cronbach's alpha) for the EI questions and good discriminant validity among the variables within the study is found by Takeuchi et al. (2011). Redman and Snape (2005) revise the EI scale for a union focus and find significant discriminant validity and reliability of .65. Sinclair and Tetrick (1995) also revise the EI scale based on treatment by the union and find a lower but acceptable reliability of the EI scale of .64. Ladd and Henry (2000) revise the EI scale based on coworker treatment and pre-test the scale which yields a coefficient alpha of .87. With the research sample, Ladd and Henry (2000) find factor loadings between .54-.78 and Cronbach's alpha of .75. Considering the analysis of the exchange ideology questions as originally designed by Eisenberger et al.
(1986) as well as the revised EI questions by other researchers, there is evidence of strong reliability and validity of the questions. Since the focus of the current study is on the coworker relationship and work engagement, the exchange ideology questions designed by Eisenberger et al. (1986) and Ladd and Henry (2000) were utilized.

The following table provides a graphic representation of the measures used in the current study. Appendix B presents the actual survey used for the current study.

Table 3

*Current Study: Constructs, Measures and Authors*

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measure</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Engagement</td>
<td>UWES-Utrecht Work Engagement Survey</td>
<td>Schaufeli et al., 2002</td>
</tr>
<tr>
<td>Social Support</td>
<td>Coworker Social Support</td>
<td>Eisenberger et al., 1986 Ladd and Henry, 2000</td>
</tr>
</tbody>
</table>

Data Collection

The survey questions gather employee perceptions on work engagement, coworker social support, and individual exchange ideology. Permission was obtained for the UWES and the coworker social support questions (W. Schaufeli, personal communication, December 3, 2012; R. Eisenberger, personal communication, December 5, 2012) as shown in Appendix C. Based on statistical evidence of validity and reliability of the survey questions provided in the Ladd and Henry (2000) research and the similarity of the questions to the Eisenberger et al. (1986) exchange ideology
questions, the Ladd and Henry (2000) exchange ideology questions were used for the study.

The survey was reviewed by both the company General Manager and Assistant General Manager prior to distribution. The purpose of the review was to discuss any potential problems with administration procedures, wording of directions and publicity materials, and survey completion scheduling.

Using the guidelines and the recommendations from Fink (2003a, 2003b), Dillman, Smyth, and Christian (2009), and Swanson and Holton (2005), the following survey administration procedures were used. Respondents were provided information about the study using several methods: insert in paycheck envelopes, flyers, and a memo from the General Manager posted on bulletin boards. The posting of information on departmental bulletin boards is a common practice within the utility company. The pre-survey communication took place two weeks prior to survey administration and included an explanation of the purpose of the survey and study, reasons participation is important yet voluntary, incentives to participate, time required to complete the survey, assurance of confidentiality and anonymity, how the data will be handled, contact name and phone number for information, and dates for survey administration. In addition, the researcher visited employees at various times throughout the pre-survey period when they collect in groups to personally encourage participation and answer any questions about the research project. Appendix D provides the pre-survey communication pieces.

The researcher is employed at the utility company and did not personally administer the survey. A trained individual unaffiliated with the company administered the paper based surveys. The decision to use a paper based survey was based on several factors. Employees are familiar with paper based surveys having completed them in the
past for other company initiatives. Many operational employees have limited experience with computers and do not use them at work. Out of 225 employees, approximately 140 have access to a work computer and personal emails and the remaining 85 do not. Using a paper based survey provided an easy and comfortable method of information sharing for employees and ensures all employees had an opportunity to participate.

The survey administrator answered participants' questions as an added assurance measure of confidentiality and anonymity. A summary of anticipated questions and answers used by the trained administrator is in Appendix E. The surveys were administered on site during morning break times, lunch, and afternoon shift changes. The paper surveys include 26 questions and took between 10 to 15 minutes to complete. The survey administrator was stationed at a table in central and accessible locations at company facilities (e.g., break rooms, training rooms, conference rooms). The surveys were given out by the administrator and questions were answered using the information in Appendix E. Participants completed the paper-based survey on-site and returned it to the administrator stationed at the table. Participants were given numbered tickets to qualify for one of four (4) gift card drawings held one week after administration. The drawing and gift card distribution was managed by an administrative support individual and did not directly involve the researcher. All surveys were given to the researcher by the administrator at the end of each day.
### Table 4

**Data Collection Procedure Plan**

<table>
<thead>
<tr>
<th>Week</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weeks One-Two</strong></td>
<td>Confirm IRB approval and documents</td>
</tr>
<tr>
<td></td>
<td>Complete pre-survey tasks</td>
</tr>
<tr>
<td></td>
<td>• Review survey with General Manager and Assistant General Manager</td>
</tr>
<tr>
<td></td>
<td>• Distribute pre-survey communication-flyers, paycheck inserts, and memo from General Manager</td>
</tr>
<tr>
<td><strong>Week Three</strong></td>
<td>Administer Survey</td>
</tr>
<tr>
<td><strong>Week Four</strong></td>
<td>Collect surveys from survey administrator</td>
</tr>
<tr>
<td></td>
<td>Complete gift card drawing</td>
</tr>
<tr>
<td><strong>Weeks Five-Six</strong></td>
<td>Manage the data</td>
</tr>
<tr>
<td></td>
<td>• Code the responses</td>
</tr>
<tr>
<td></td>
<td>• Prepare the codebook</td>
</tr>
<tr>
<td></td>
<td>• Enter the data</td>
</tr>
<tr>
<td></td>
<td>• Run a preliminary analysis, check accuracy</td>
</tr>
<tr>
<td></td>
<td>• Clean the data</td>
</tr>
<tr>
<td></td>
<td>• Prepare a final codebook</td>
</tr>
<tr>
<td><strong>Weeks Seven-Nine</strong></td>
<td>Analyze the data</td>
</tr>
<tr>
<td></td>
<td>• Implement the data analysis plan</td>
</tr>
<tr>
<td><strong>Week Ten-Twelve</strong></td>
<td>Prepare report of results</td>
</tr>
</tbody>
</table>

**Data Analysis**

Study participants rated their perceptions related to work engagement, coworker social support, and exchange ideology using questions designed by Schaufeli et al., (2002), Eisenberger et al. (1986) and Ladd and Henry (2000). Descriptive statistics are reported on demographic data and all three variables. Cronbach's alpha is also provided on all three variables to indicate the internal consistency of the ratings. Kendall's Tau is used to specify the level of correlation between the variables and Partial Correlation is
used to identify any potential influence exchange ideology has on the relationship between coworker social support and work engagement. The following data analysis plan relates each research objective to specific survey questions and identifies the data category and statistical test for statistical analysis.

Table 5

*Data Analysis Plan*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Task</th>
<th>Data Category</th>
<th>Statistical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sample Demographic Data Questions 24-26</td>
<td>Nominal</td>
<td>Descriptive Statistics*</td>
</tr>
<tr>
<td>2</td>
<td>Questions 1-9 Work engagement (UWES)</td>
<td>Ordinal</td>
<td>Descriptive Statistics* (UWES, CSS)</td>
</tr>
<tr>
<td></td>
<td>Questions 10-18 Coworker social support (CSS)</td>
<td></td>
<td>Cronbach's alpha for internal consistency of ratings (UWES, CSS)</td>
</tr>
<tr>
<td>3</td>
<td>Questions 19-23 Exchange ideology</td>
<td>Ordinal</td>
<td>Cronbach's alpha for internal consistency of ratings (EI)</td>
</tr>
<tr>
<td></td>
<td>Questions 10-18 Coworker social support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Questions 19-23 Exchange ideology</td>
<td>Ordinal</td>
<td>Kendall's Tau for Correlation</td>
</tr>
<tr>
<td></td>
<td>Questions 1-9 Work engagement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5 (continued).

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Task</th>
<th>Data Category</th>
<th>Statistical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Questions 1-9</td>
<td>Ordinal</td>
<td>Partial Correlation</td>
</tr>
<tr>
<td></td>
<td>Work engagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Questions 10-18</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coworker social support</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Questions 19-23</td>
<td></td>
<td>Descriptive Statistics*</td>
</tr>
<tr>
<td></td>
<td>Exchange ideology</td>
<td></td>
<td>(EI)</td>
</tr>
</tbody>
</table>

Note. Descriptive statistics include: range, minimum and maximum score, mean, and standard deviation

Summary

The cross-sectional descriptive study took place within a utility company at two locations in the Southeastern United States. There are approximately 210 potential study participants employed in a range of occupations from cashiers, operators, line workers, customer service representatives, meter readers, appliance repairers, accountants, engineers, and information technology specialists. The participants were invited to complete a paper survey consisting of questions measuring work engagement (UWES), coworker social support, exchange ideology, and demographic information. The UWES collected data on employee perceived work engagement and the remaining questions collected data on employee perceptions of coworker social support and individual exchange ideology in relation to treatment by coworkers. Finally, the survey included several demographic questions regarding the participants.
Specific statistical tests were used to analyze the data as displayed in Table 5-Data Analysis Plan. The remaining two chapters of the current study describe the results of the data analysis as well as a discussion of future research considerations.
CHAPTER IV
RESULTS

Introduction

The study conducted at a community-based utility company in the Southeastern United States examined the perceived relationships between three variables: work engagement, coworker social support, and individual exchange ideology. Specifically, the study sought to determine if a relationship exists between exchange ideology, coworker support, and work engagement, as perceived by study participants. The study also investigated the perceived potential of one variable, exchange ideology, to influence the relationship between coworker social support and work engagement.

The Utrecht Work Engagement Survey (UWES) was used to determine the participant's state of engagement using nine questions measuring three engagement dimensions: persistence (absorption), enthusiasm (dedication), and energy (vigor) (Bakker & Demerouti, 2008; Schaufeli et al., 2002; Schaufeli et al., 2006). Survey questions originally developed by Eisenberger et al. (1986) and later revised by Ladd and Henry (2000) were used to measure perceived coworker social support and exchange ideology. Finally, participants were asked three demographic questions required by the developer of the work engagement survey (UWES), Wilmar Schaufeli, in exchange for using the UWES engagement survey questions.

The following sections present a review of how the survey data was analyzed along with a summary of the demographics of the sample. The statistical tests used to answer the research questions are briefly reviewed. Finally, the results of the tests are described.

Data Analysis

*Data entry and coding.* Survey data for each variable and individual was averaged to create Likert scale data to represent the constructs in each question (i.e., work
engagement, coworker social support, and exchange ideology) (Boone & Boone, 2012; Carifio & Perla, 2007; Gliem & Gliem, 2003). Average variable ratings were used to ensure numerical validity as two variables had nine rated questions (i.e., work engagement and coworker social support) and one variable had five rated questions (i.e., exchange ideology).

Surveys were given to the researcher by the survey administrator after participants completed them at each location. All forms and surveys were secured at the researcher's home office throughout the project. The surveys were coded by location and numbered. Once all surveys were received, the data was entered into an Excel spreadsheet. Although statistical analysis was conducted in SPSS, data was entered into Excel initially to make use of various enhancements within the software such as conditional formatting for rating data and manipulability for response cells. Gender and occupation were initially entered into Excel in alphabetic form and then converted to numeric. The conversion was cross-checked through sorting in Excel. In addition, an individual other than the researcher randomly selected every 10th survey to cross check and confirm accurate data entry. Once data accuracy was confirmed, the data was transferred into SPSS. All paper surveys will be retained for one year and then destroyed.

Once the rating data was transferred to SPSS, an additional step was required for the coworker social support and exchange ideology ratings. Out of the nine coworker social support statements, seven were worded positively and two were worded negatively. Out of the five exchange ideology statements, three reflected a low exchange ideology and two reflected a high exchange ideology. It is a common practice to include positively and negatively worded questions in survey design to guard against acquiescent behavior, the tendency for respondents to agree with survey statements more than they
disagree with survey statements, or extreme response bias (Barnette, 2000; Cronbach, 1950; Sauro & Lewis, 2011). In order to ensure common direction for the averaged variable ratings, it was necessary to reverse code the ratings for coworker social support questions 14 and 16 and exchange ideology questions 21, 22, and 23. The recoding ensured common direction for all nine coworker social support ratings. Therefore, the higher the ratings on coworker social support questions, the more the participant viewed the level of support from their coworkers in a positive manner. The lower the ratings on coworker social support questions, the less the participant perceived a positive level of coworker support. The recoding also ensured a common exchange ideology framework for all five exchange ideology ratings. Exchange ideology is the degree to which an individual's work effort is contingent upon perceived organizational treatment (Eisenberger et al., 1986; Witt & Broach, 1991a; Witt, 1991b). Therefore, the higher the ratings on the exchange ideology questions, the stronger their exchange ideology. An individual with a strong exchange ideology performs congruent with reinforcement (Witt & Broach, 1991a). In other words, when an individual with a strong exchange ideology is treated well by others, they will work hard; if they are not treated well, they will not (Witt & Broach, 1991a). The recoding process is consistent with other research (Eisenberger et al., 1986; Takeuchi et al., 2011; Witt & Broach, 1991a; Witt, 1991b; Witt et al., 2001). Finally, new variables were created and calculated in SPSS resulting in an average rating on each variable for each participant. Data analysis used the average variable rating for each participant. The codebook used for data entry and analysis is found in Appendix G.

Descriptive statistics. Basic descriptive statistical analysis was produced for each variable in the study: age, gender, occupation, work engagement (WE), coworker social
support (CSS), and exchange ideology (EI). The descriptive statistics include: number of participants, range, minimum, maximum, mean, and standard deviation. The range is the measurement of the width of the rating distribution and is calculated by subtracting the highest and lowest ratings (Sprinthall, 2012). The minimum and maximum rating is self-explanatory while the mean is the average of all the scores. The standard deviation is the measure of variability and an indication of how much all the scores in a distribution deviate from the mean (Sprinthall, 2012).

*Cronbach's alpha.* To measure the internal consistency and internal reliability of the WE, CSS, and EI survey question ratings, Cronbach's alpha was calculated. Cronbach's alpha is "the average value of the reliability coefficients one would obtain for all possible combinations of items when split into two half-tests" (Gliem & Gliem, 2003, p. 84). Since it identifies which items are or are not contributing to the overall reliability of the ratings, it is probably the most popular reliability procedure in use today (Sprinthall, 2012).

*Kendall's tau.* To determine if a relationship exists between WE, CSS, and EI (i.e., Research Objectives Two, Three, and Four), Kendall's tau was used. Kendall's tau is a non-parametric test for use with ordinal data and reflects whether two variables may be regarded as statistically dependent (Cliff & Charlin, 1991; Huck, 2012). While Spearman's rho is also commonly used to determine the relationship between variables, Kendall's tau was selected because some research suggests it may be more statistically reliable and produce a more robust statistical measurement, particularly for smaller sample sizes and extreme observations (Fredricks & Nelson, 2007; Gibbons & Chakraborti, 2003). In addition, Kendall's tau has a more intuitive interpretation which makes it easier to explain and understand. Kendall's tau is the proportion of concordant
pairs minus the proportion of discordant pairs, and Spearman's rho is the sum of deviations squared divided by the number of observations times the observations squared minus 1 (Fredricks & Nelson, 2007; Newson, 2002). In other words, Kendall's tau is calculated by looking at all possible pairs of points and counting up how many are concordant and how many are discordant. Concordant pairs occur when the ordering of two points on the first variable is the same on the second variable. Discordant pairs occur when the opposite is true. The difference between the proportion of concordant and the proportion of discordant pairs of points, out of all possible pairs, is Kendall's tau. (Newson, 2002). While the desired sample size is 137 completed surveys, Kendall's tau provides more accurate p values in sample sizes as small as 12 or less (Cliff & Charlin, 1991). Therefore, for the simple correlational analysis of Research Objectives Two, Three, and Four, the more appropriate non-parametric test was selected.

*Partial correlation.* To determine if EI has any influence on the suspected relationship between coworker social support and work engagement (i.e., Research Objective Five), partial correlation was used. Partial correlation is a parametric, statistical test indicating the degree to which two variables are linearly related in a sample, partialling out the effects of one or more control variables (Green & Salkind, 2011). The first step in partial correlation is to calculate the magnitude of the correlation between the variables in question, which is the correlation between coworker social support, work engagement, and exchange ideology. The next step is to analyze the correlation between these variables, partialling out the effects of the third variable which in the current study is exchange ideology (Green & Salkind, 2011). Field (2009) offers the following explanation of partial correlation: "A partial correlation quantifies the
relationship between two variables while controlling for the effects of a third variable in the original correlation" (p. 190).

A parametric statistical test was selected for the more complex analysis of Research Objective Five for a number of reasons. Parametric statistics require interval data and are considered to be more powerful, sensitive, and less likely to miss weaker or emerging findings in comparison to non-parametric statistics (Carifio & Perla, 2007; McCrum-Gardner, 2008). The current study's survey data is ordinal data since individual responses to each question indicate an order or rank of magnitude but do not express any relative distance between each scale point (Sprinthall, 2012). However, survey data for each variable and individual were summed to create Likert scale data in order to represent the constructs in question (i.e., work engagement, coworker social support, and exchange ideology) (Boone & Boone, 2012; Carifio & Perla, 2007; Gliem & Gliem, 2003).

Ordinal response formats can and usually do, when summed, produce empirically interval level scales (Carifio & Perla, 2007; Clason & Dormody, 1994). This finding is particularly true when the following conditions are met: a five to seven point Likert response format, Likert-like scale questions expressing both positive and negative opinions or sentiments, with the questions holding together well factorially (Carifio & Perla, 2007; Pell, 2005). Stated another way, "it is acceptable in many cases to apply parametric techniques to non-parametric data such as that generated from Likert scales," provided the assumptions are clear and the data is of the appropriate size and shape (Boone & Boone, 2012; Pell, 2005, p. 970). All three sets of questions in the current study on coworker social support, work engagement, and exchange ideology use a seven point Likert response format. The questions measuring coworker social support and exchange ideology include Likert-like scale questions expressing both positive and
negative opinions. While the UWES questions are all positively stated, there is ample evidence of the validity of the instrument across a number of occupations and geographic locations.

In addition, a review of previously published research using survey questions to assess engagement, coworker social support and exchange ideology took place. In these studies, parametric statistical tests were used without discussion of ordinal survey data (Flynn, 2003; Ganzach et al., 2002; Ladd & Henry, 2000; Redman & Snape, 2005; Sinclair & Tetrick, 1995; Takeuchi et al., 2011; Witt et al., 2001). Averaging items and standardizing items to develop scales that enhance the interpretability of findings were discussed in several articles (Redman & Snape, 2005; Takeuchi et al., 2011). This procedure was in line with the proposed plan to create a summed or composite score for each variable. Therefore, partial correlation was used to determine if exchange ideology influences the relationship between coworker social support and work engagement. A summary of resulting demographic data, Research Objective One, is presented in the following section.

Demographics

Research Objective One reports the descriptive statistics on survey participants' demographic data. Efforts were made to inform all employees at the utility about the survey through several pre-survey communication efforts: a paycheck insert, a flyer posted on bulletin boards, a letter from the General Manager, and researcher announcements. Out of the 206 possible participants, 124 actually completed the 26 question survey yielding a response rate of 60%. Of the participants who completed the survey, five surveys did not provide usable demographic data. There were another five
incomplete surveys in one or more variable ratings (i.e., engagement, coworker social support, or exchange ideology). The following decisions were made:

- Since demographic variables are simply reported and not analyzed in this study, the five surveys without usable demographic data were kept for analysis.
- The five surveys with incomplete ratings on variables were not usable.

Therefore, a total of 119 or a 58% final response rate resulted.

The reported age ranges for the participants (n=114) was 22-66 years of age. The age ranges compare favorably with the employee population age range of 21-66. The reported gender (n=117) was 26% female and 74% male. Gender data is also consistent with the employee population gender of 21% female and 79% male. The reported occupational categories requested by the UWES survey developer, Schaufeli, demonstrate differences between reported and population occupations. The occupation differences could be due to several reasons. Participants in the survey were asked to check their occupational category. The occupational categories were not specifically defined in the survey, although the researcher provided general definitions for the survey administrator to use should anyone ask questions. The researcher identified occupational categories for the positions within the company eligible to participate (n=206) based on knowledge of the job and the occupation definitions. It is possible the researcher's decisions on the occupational category differed from the occupational category a participant self-selected. It is also possible more professionals actually completed the surveys than those in other job categories. The completed surveys indicate almost three times the number of professionals completing the survey than the percentage of actual company professionals.
Table 6

Demographic Data

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>Sample data</th>
<th>Population data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n=206</td>
</tr>
<tr>
<td>Age Range</td>
<td>22-66</td>
<td>21-66</td>
</tr>
<tr>
<td></td>
<td>n=114</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>26% Female</td>
<td>21% Female</td>
</tr>
<tr>
<td></td>
<td>74% Male</td>
<td>79% Male</td>
</tr>
<tr>
<td></td>
<td>n=117</td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td>51.7% Blue Collar</td>
<td>63% Blue Collar</td>
</tr>
<tr>
<td></td>
<td>20.7% White Collar</td>
<td>26% White Collar</td>
</tr>
<tr>
<td></td>
<td>27.6% Professional</td>
<td>11% Professional</td>
</tr>
<tr>
<td></td>
<td>Self-reported, n=116</td>
<td>Researcher reported</td>
</tr>
</tbody>
</table>

Using the before mentioned statistical tests and data analysis process, the participant survey data was entered into SPSS, and the results are described below.

Results

As part of analyzing the relationship between work engagement, coworker social support, and exchange ideology in Research Objectives Two through Five, descriptive statistics were calculated. It is important to note all three variables were rated on a seven point scale. However, the work engagement scale was a frequency scale from 0 (never) to 6 (always). The coworker social support and exchange ideology scales were descriptive scales indicating level of agreement and ranged from 1 (strongly disagree) to 7 (strongly agree). The distinction between rating scales provides clarity for the
summarized descriptive statistics provided in Table 7, particularly the work engagement minimum and maximum data.

The data indicate a wide range of ratings on each variable with the minimum and maximum spanning almost the entire rating scale. When the average ratings on each variable are analyzed in relation to the rating scale (i.e., 0-6 or 1-7), the average rating for work engagement and coworker social support are very similar. The participants in the study reported feelings of work engagement (i.e., vigor, dedication, and absorption) at 4.3856, between once a week and a few times a week, on average. Participants agreed more than slightly and less than moderately with feelings of coworker social support with an average of 5.1718. Finally, the exchange ideology average rating of 2.6269 indicates the participants in the study moderately disagree to slightly disagree with statements indicating a high exchange ideology. The exchange ideology average points to a belief in work effort independent of coworkers' treatment. In summary, on average the study participants reported close to moderate levels of work engagement and coworker social support but disagreement with a high exchange ideology, indicating they felt engaged and supported by their coworkers while not requiring high relationship reciprocity in their exchange ideology.

Table 7

*Descriptive Statistics*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Engagement</td>
<td>119</td>
<td>5.22</td>
<td>.78</td>
<td>6.00</td>
<td>4.3856 (0-6)</td>
<td>.94909</td>
</tr>
</tbody>
</table>
Table 7 (continued).

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coworker Social Support</td>
<td>119</td>
<td>4.67</td>
<td>2.22</td>
<td>6.89</td>
<td>5.1718</td>
<td>.85097</td>
</tr>
<tr>
<td>Exchange Ideology</td>
<td>119</td>
<td>6.00</td>
<td>1.00</td>
<td>7.00</td>
<td>2.6269</td>
<td>1.38146</td>
</tr>
</tbody>
</table>

Note. All data represents average ratings for each participant on each variable: work engagement, coworker social support, and exchange ideology.

Cronbach’s alpha was calculated for questions measuring each variable. As described earlier, the alpha statistic measures the internal consistency of the work engagement, coworker social support, and exchange ideology survey question ratings. Measuring the correlation between the average variable ratings and the total average for that variable using Cronbach’s alpha provides an indication of the variability within the scores and how closely related the variables are as a group. The Cronbach’s alphas reported in Table 8 are consistent with previously reported statistics for the three variables and indicate an acceptable level of internal consistency and reliability in participants' responses (Nunnaly & Bernstein, 1994). The Cronbach's alpha for work engagement was .870. Cronbach’s alpha for coworker social support in the current study was .750. Finally, the Cronbach's alpha for exchange ideology was .792. The alphas indicated the average variable ratings by participants was strongly correlated with the overall average and, therefore, represented an internally consistent set of ratings on each variable.
Table 8

*Cronbach's α for Research Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Engagement</td>
<td>9</td>
<td>.870</td>
</tr>
<tr>
<td>Coworker Social Support</td>
<td>9</td>
<td>.750</td>
</tr>
<tr>
<td>Exchange Ideology</td>
<td>5</td>
<td>.792</td>
</tr>
</tbody>
</table>

Research Objectives Two, Three, and Four sought to determine the relationship between work engagement, coworker social support, and exchange ideology. Kendall's tau was calculated to identify if a relationship exists between the three variables. The correlation ranges were -.199 to .213 as illustrated in Table 9. The results indicated the correlation between each of the three variables was statistically significant at the .01 level. In general, the results suggested participants' ratings on work engagement and coworker social support were positive and linearly related. In other words, participants with higher work engagement ratings tended to also report agreement with higher coworker social support. On the other hand, the correlations between perceived work engagement and coworker social support with exchange ideology were negative. Therefore, engaged participants were more likely to perceive their coworkers as supportive, while disengaged participants were more likely to perceive their coworkers as unsupportive. Study participants with higher work engagement and positive coworker support perceptions reported lower exchange ideology ratings or preference for equity in relationships.
Table 9

*Kendall’s tau for Research Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Exchange Ideology</th>
<th>Work Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Engagement</td>
<td>119</td>
<td>-.199*</td>
<td></td>
</tr>
<tr>
<td>Coworker Social Support</td>
<td>119</td>
<td>-.222*</td>
<td>.213*</td>
</tr>
</tbody>
</table>

*Note:* *p<.01, two-tailed.

Research Objective Five sought to determine the influence exchange ideology had on the work engagement and coworker social support relationship. Partial correlation coefficients were computed for work engagement and coworker social support controlling for exchange ideology. In calculating the partial correlation, SPSS first calculated a bivariate correlation between the three variables. The zero order correlation presented the relationship between work engagement and coworker social support, while ignoring the influence of exchange ideology. The correlations were significant at the .01 level and ranged from -.321 to .340, indicating positive relationship between engagement and support and a negative relationship between exchange ideology and the remaining variables. This finding was consistent with the correlational relationships found with Kendall’s tau.
Table 10

*Bivariate Correlation for Research Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Exchange Ideology</th>
<th>Work Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Engagement</td>
<td>119</td>
<td>-.321*</td>
<td></td>
</tr>
<tr>
<td>Coworker Social Support</td>
<td>119</td>
<td>-.296*</td>
<td>.340*</td>
</tr>
</tbody>
</table>

*Note:* *p*<.01, two-tailed.

When the effects of the exchange ideology average rating were controlled for or held constant across the remaining two variables, the correlation between work engagement and coworker social support was lower and still statistically significant at .271. Partial correlation identified the strength of the unique relationship between work engagement and coworker support after removing the influence of exchange ideology.

The change can also be described as a difference in the variation in work engagement explained by coworker social support when exchange ideology is controlled and when it is not. In terms of variance, the value of R-squared for the partial correlation was .07 (i.e., correlation squared), which means coworker social support accounted for only 7% of the variance in work engagement. When the effects of exchange ideology were not controlled for within the sample, coworker social support shared 12% variation in work engagement. By removing the portion of variation that is shared by exchange ideology, a measure of the unique relationship between work engagement and coworker social support can be identified. Partial correlation is used to find out the size of the unique portion of variance (Field 2009). When exchange ideology was controlled for in the correlation analysis, the amount of variation shared by work engagement and
coworker social support decreased. Therefore, coworker social support alone does not explain the variation in work engagement for employees of this utility company. There is a multifaceted relationship between social support, work engagement, and exchange ideology for which partial correlation provides additional understanding. Within the current study, exchange ideology played a role in the relationship between coworker social support and work engagement.

As previous studies show, work engagement and coworker social support as job resource are related at statistically significant levels (May et al., 2004; Richardsen et al., 2006; Schaufeli et al., 2004). Bivariate correlation and Kendall’s tau both indicate a positive and statistically significant correlation between engagement and coworker social support when exchange ideology is analyzed with the two variables. In addition, when exchange ideology is controlled, the correlation between work engagement and coworker social support is statistically significant, though lower.

Summary

The purpose of the study was to investigate the relationship between coworker social support and work engagement and to explore the influence of exchange ideology within this relationship. The study population included employees at two different locations of a utility company providing electric, water, wastewater, gas, and cable services. Participants completed a written survey document which included questions on work engagement, coworker social support, exchange ideology, and demographics. The survey was administered in person at both locations by a trained administrator over a three day period.

The results of the survey suggested participants have strong work engagement and coworker social support perceptions and a tendency toward a low exchange ideology.
The alpha scores indicated acceptable internal consistency. The correlation between work engagement and coworker social support was positive and statistically significant at the .01 level. The correlation between the low exchange ideology ratings and the remaining two variables was negative and statistically significant at the .01 level. The researcher found a decreased positive correlation between work engagement and coworker social support when the effects of exchange ideology are controlled. Therefore, the results of the current study suggested exchange ideology influences the relationship between work engagement and coworker social support, indicating the importance of understanding employee ideology in making job resource and work design decisions to effect work engagement. This relationship will be discussed in detail in Chapter V.

The following chapter presents the study summary, findings, conclusions, and recommendations along with a discussion of the results in light of the study setting. Limitations of the study and implications for future research are also discussed.
CHAPTER V
DISCUSSION

Introduction

In the sections that follow, a summary of the study is presented along with the findings. Conclusions are discussed, and practical recommendations for addressing the issues raised in the research are proposed. A discussion of possible reasons for the results within the particular research setting is provided. Finally, the researcher reviews the limitations of the research, suggests additional areas for study, and confirms the importance of continued research.

Summary of the Study

Today's workplace is emotionally and physically exhausting as workers strive to update professional abilities, locate and keep jobs, and manage family demands all of which result in increased work hours, stress, burnout, and work disengagement (American Psychological Association, 2009; ComPsych, 2007; Galinsky et al., 2005; Gallup, 2006, 2010, 2011; Thackray, 2001, 2005). Despite spending over $720 million annually on engagement improvement efforts, companies continue to lose over $600 billion to a stressed and disengaged workforce (Coffman & Gonzalez-Molina, 2002; ComPsych, 2010; Hollon, 2012). While previous engagement studies emphasize the supervisory and employee relationship, there is limited consideration of relationships between peer employees and the subsequent effects of the relationship on engagement and work stress. In addition, a specific investigation of the role of individual exchange ideology and its influence on coworker social support as a means to impact engagement levels was not found. With the opportunity to increase understanding of the three interconnected variables, the current research study sought to determine the relationship
between work engagement, coworker social support, and exchange ideology and whether one variable, exchange ideology, influences the relationship between coworker social support and work engagement.

The literature review centered on the history of engagement research and its relationship to work related stress and burnout. While a number of labels and definitions are proposed for engagement, the current research used the work engagement definition by Schaufeli et al. (2002) of a positive, fulfilling, work related state of mind characterized by vigor, dedication, and absorption. Included within the work engagement and work stress literature is the job resource of coworker social support as a means to buffer the impact of work stress and burnout and impact work engagement levels (May et al., 2004; Richardsen et al., 2006; Schaufeli & Bakker, 2004). Social support is defined as the degree to which a job provides opportunities for advice and assistance from others useful in achieving work goals (Cohen & Wills, 1985; Morgeson & Humphrey, 2006). From the social support literature, Saks (2006) proposes individuals choose to engage themselves in work to varying degrees in response to resources and benefits received from their organization. Eisenberger et al. (1986) find employees' commitment to their organization is influenced by their perception of the organization's commitment to them, and the commitment is based on the strength of an employee's exchange ideology. Exchange ideology is a set of global beliefs that work effort should depend on treatment by the organization (Eisenberger et al., 1986). Ladd and Henry (2000) build upon these concepts and evaluate the effect of coworker social support and individual exchange ideology perceptions on work behavior. The literature review provides the foundation for investigating the relationship between the three concepts of work engagement, coworker social support, and exchange ideology as a means to better understand the exchange
dynamics within coworker relationships, ultimately influencing employee decisions to reciprocate behavior, manage stress, and engage in work (Cole et al., 2002).

In the current study, perceptions on employee work engagement, coworker social support, and exchange ideology were collected to answer five research objectives. Research Objective One describes the demographic characteristics of study participants. Research Objectives Two, Three, and Four investigate the relationship between work engagement, coworker social support, and exchange ideology. Research Objective Five examines the influence of individual exchange ideology on the coworker social support and work engagement relationship.

Using previously validated questions for each variable, a paper based survey was administered by a trained survey administrator to employees of a community-based utility company in the Southeastern United States over three days and at two company locations. Employees within the utility worked a variety of shifts, and the occupations range from hourly, blue collar positions requiring minimal formal education to experienced and credentialed, management level accountants and engineers. At the time of survey administration, there were 206 eligible participants, and 119 employees voluntarily completed usable surveys for a response rate of 58%. The data from the completed surveys was analyzed using SPSS. The findings, conclusions, and recommendations from the data analysis follows.

Findings, Conclusions, and Recommendations

The following summary includes a findings review based on the statistical analysis described earlier. In addition, conclusions are derived from the findings, and a description of possible recommendations are presented.
Work Engagement, Coworker Social Support and Exchange Ideology Findings.

Study participants who reported feelings of work engagement between once a week and a few times a week agreed more than slightly and less than moderately with feelings of positive coworker social support, and moderately disagreed to slightly disagreed with statements indicating a high exchange ideology. In other words, participants reported feelings of work engagement and positive coworker social support within a low exchange ideology or preference for equity mindset.

Work Engagement, Coworker Social Support and Exchange Ideology

Conclusions. When the findings of the three variables are considered together, the following conclusion can be made: employees can be engaged and feel supported by their coworkers even if their personal exchange ideology is low. The conclusion is different than offerings in other studies exploring the nature of exchange ideology. Some suggest exchange ideology is a pre-existing, general belief system an individual brings to the exchange relationship (Sinclair & Tetrick, 1995). Others propose the difference in exchange ideology may be due to individual factors (i.e., personality and dispositional variables) and cultural factors (Blakely et al., 2005; Cropanzano & Mitchell, 2005; Shore & Coyle-Shapiro, 2003). Based on these assertions, employees come into a work relationship with a set exchange ideology, and the higher the exchange ideology, the more obligated an individual will feel to repay others with higher support and engagement (Cropanzano & Mitchell, 2005; Kular et al., 2008; Saks, 2006). At the same time, it is possible that some individuals may find individual reinforcement is less relevant in their decision to engage in certain organizational behaviors (Witt, 1991b).

The current study's results may be due to a number of factors. Perhaps the study participants' exchange ideology is shaped over time by supportive coworkers and overall
strong feelings of engagement. Or, the strength of the participants’ exchange ideology may lessen as the organization and coworkers demonstrate support and consistent obligation repayment. Finally, it is feasible that the study participants come into the organization with an unusual combination of low exchange ideology, high engagement, and positive perceptions of coworker support.

**Recommendation One.** As recommended by other research, the current study analyzed engagement across a variety of occupational settings (Bakker et al., 2003a; Bakker et al., 2004; Saks, 2006; Schaufeli et al., 2008; Warr, 1990) and within peer relationships (Cole et al., 2002; Flynn, 2003; Flynn & Brockner, 2003; Organ & Paine, 1999) in an effort to better understand the influence of variables such as coworker social support and exchange ideology (Eisenberger et al., 1986; Saks, 2006).

The JD-R model proposed by Bakker and Demerouti (2008) offers social support as one type of job resource leading to work engagement and higher performance even when employees are confronted with high job demands. Engaged employees who are intrinsically motivated to meet work objectives create job resources (e.g., ask colleagues for help) as a way to achieve objectives (Xanthopoulou et al., 2009a). Therefore, as workers become engaged in their work, their performance increases, leading to a positive gain spiral of increased job and personal resources capable of recurrently affecting work engagement levels.

One recommendation is to provide employees with job resources to aid in the positive spiral gain of work engagement. Job resources activate a motivational process that increases an employee’s willingness to dedicate efforts and abilities to the work tasks and, thereby, result in increased engagement (Crawford et al., 2010). Of particular note is the importance of resources surrounding the meaningfulness of jobs as it has been
found to have the strongest relation to employee outcomes in terms of engagement (May et al., 2004). Based on engagement research, designing meaningful tasks around a shared sense of destiny and purpose, connecting with others on an emotional level, and raising personal aspirations are all examples of ways supervisors can create job resources leading to improved engagement (Hobeche & Springett, 2003). Socio-cultural factors within the work culture and climate of an organization are suspected to influence engagement through the building of community, pride in work, employee involvement, interactive decision making, and empowerment (Kular et al., 2008; Saks, 2006; Towers Perrin, 2003). Job redesign, supervisory coaching emphasizing clear performance goals, and daily reinforcement of resources have also been suggested as potential drivers of increased engagement (Attridge, 2009; Xanthopoulou et al., 2009b).

Given the important role of job resources in engagement, supervisors should take steps to identify the resources most important to their employees as no one set of resources fits all work situations (Saks, 2006). Collecting employee data on resource preferences can be accomplished through actionable surveys and tailored interventions to address the needed resources within a specific work environment (Bates, 2004; Demerouti et al., 2001). Once interventions are implemented, it is important to re-survey engagement levels and resource preferences to monitor effectiveness and to continue to seek higher engagement levels.

**Recommendation Two.** Social exchange processes within the workplace enhance employee commitment, yield a competitive advantage, and relate positively to work engagement (Ganzach et al., 2002; Witt et al., 2001; Xanthopoulou et al., 2009a). Social support is not only related to work engagement; it is also the most well-known situational variable proposed as a potential buffer against job stress and protection against the
pathological consequences of stressful experiences (Bakker et al., 2005b). In addition, as engaged employees experience positive emotions and begin creating their own job and personal resources, they transfer their engagement to others through the social exchange process and influence their colleagues to perform better individually and as a team (Bakker & Demerouti, 2008). Considering such research in light of the social support results of the current study, organizations should act in ways that activate the social exchange process, beginning as early as the recruiting phase and throughout the employee's work tenure as the value of personal relationships in the workplace are beneficial to the employee and the employer (Ganzach et al., 2002; Kular at al., 2008; May et al., 2004).

Managers' actions build the foundation for trust and social exchange (Whitener et al., 1998). Therefore, managers can take the first step and initiate trusting relationships through relaxing control, giving opportunities for small exchanges (e.g., projects and team based tasks) escalating into higher value benefits for coworkers, encouraging and providing opportunities for the habitual discharge of obligations among employees and across departments, allowing employees to demonstrate concern for each other, and fostering open communication where thoughts and ideas flow freely between employees and management (Whitener et al., 1998). In particular, providing opportunities for frequent favor exchange may lead givers and receivers to develop an affinity for one another as repetitive exchanges make people feel good about the exchange relationship and their exchange partners (Flynn, 2003; Willer et al., 1997). Other ways to improve the social exchange process include human resource policies and procedures which reflect procedural justice, due process, integrity, and an organizational culture with patterns of
communication, coordination, and decision making that are inclusive and value people (Whitener et al., 1998).

**Recommendation Three.** There is value in understanding the exchange ideology levels of employees and the relationship to important work factors such as coworker social support and engagement. Understanding can be obtained through various data collection methods and used to adapt managerial approaches and supervisory styles of feedback, support, communication, job design, and task assignment (Lin, 2007; Witt, 1991b; Witt et al., 2001), which may, in turn, affect equity preferences and obligation responses. Some suggest considering exchange ideology when putting team members together to achieve coworker congruence and increase team effectiveness (Lin, 2007). Taking an individualized approach and learning the managerial styles best suited within a particular work environment and organizational culture for a specific employee population could make a difference in engagement within an organization.

**Work Engagement, Coworker Social Support, and Exchange Ideology Relationship Findings.** The results indicate a positive relationship between work engagement and coworker support perceptions. As work engagements levels increase, so do coworker support perceptions. However, the relationship between exchange ideology and the remaining two variables is negative. As participants indicate higher levels of engagement and coworker support, the results suggest a lower exchange ideology.

**Work Engagement, Coworker Social Support, and Exchange Ideology Relationship Conclusions.** The literature suggests individuals with a strong exchange ideology are more likely to feel obligated to return benefits and repay others with support and higher levels of engagement (Cropanzano & Mitchell, 2005; Kular et al., 2008; Saks, 2006). However, the results of the current study are interesting as engagement and
coworker support levels are high while exchange ideology levels are low. In other words, study participants are supportive and engaged while operating without a high exchange ideology and obligation point of view. Individuals with such a low exchange ideology view interactions without a high need for fairness and reciprocity.

It is possible participants are reporting relatively high levels of engagement because they are also experiencing moderately high levels of coworker social support. In addition, engaged participants may create job resources in the form of coworker support because they feel psychologically safe within their work environment (Kahn, 1990). It is feasible for higher levels of coworker social support to lessen the exchange ideology preferences of study participants or lessen its importance in the work exchange relationship. In addition, work environment characteristics where trust and positive exchanges develop over time may decrease the pressure to quickly discharge obligations or require that of others to maintain the relationship. As employees are able to establish strong bonds through repeated exchanges, trusting relationships are built over time. Ultimately, the bonds may lead the parties to become more tolerant of perceived imbalances in their exchange relationships since imbalances can be quickly eradicated in times of stress (Flynn, 2003; Gulati, 1995; Kollock, 1994). The importance of trust bonds developed within work environments fraught with danger and operating in times of stress will be more fully explored in the discussion section.

Work Engagement, Coworker Social Support, and Exchange Ideology Relationship Recommendations. Many of the recommendations previously presented are applicable here. Since the three variables are related in statistically significant ways, approaches to address one variable have the potential to also affect the remaining variables. Prior to implementing any approach, it is important to understand the unique
work environment, preferences, and perceptions of employees within an organization. Surveys are one way to obtain such an understanding. Organizations can use survey and qualitative data acquired through interviews and observation to individualize job resources, job design, project teams, communication and feedback styles, decision making processes, community involvement opportunities, vision and value statements, as well as create specific interventions designed to improve the quality of the work environment. Depending on the particular needs of an organization, such actions have the potential to impact the specific variables of engagement, social support, and exchange ideology as well as the overall relationship among the variables as a part of the positive spiral gain described previously. The answers to these questions and the level of interconnection between social support as a job resource and engagement deserve additional study.

*Role of Exchange Ideology Findings.* Exchange ideology influenced the relationship between work engagement and coworker social support. The results could also be explained in terms of variance with the inclusion of exchange ideology, diminishing the amount of variation shared by work engagement and coworker social support. As described by Cropanzano and Mitchell (2005) and Takeuchi et al. (2011), individuals with a low exchange ideology are more open minded and agreeable, have a higher propensity to trust others, and are less likely to care if exchanges are not reciprocated.

*Role of Exchange Ideology Conclusions.* From the current research, it is unclear whether individuals enter the workplace with a set or variable exchange ideology. Questions still remain as to the effect of supportive coworkers and feelings of work engagement on an individual's exchange ideology and the impact of the positive spiral
gain within the JD-R model on all three variables. Nevertheless, employees can be engaged in their work and feel their coworkers support them while possessing a low exchange ideology.

Other studies analyze whether exchange ideology moderates the relationship between two variables and often differentiates exchange ideology into high-middle-low categories based on one standard deviation below and above the mean. Previous research often finds a high or strong exchange ideology intensifies the relationship between the other variables studied (Cropanzano & Mitchell, 2005; Eisenberger et al., 1986; Ladd & Henry, 2000; Redman & Snape, 2005; Saks, 2006; Witt et al., 2001). Empirical evidence has indicated that exchange ideology moderates the relationship between individual perceptions of their environment and their subsequent behaviors (Witt et al., 2001).

While the current study does not use the same statistical analysis techniques, the partial correlation analysis does identify an influence of exchange ideology on the relationship between work engagement and coworker social support. Even in a situation where employees experience engagement and coworker support, low exchange ideology can influence the relationship.

Role of Exchange Ideology Recommendations. Despite the distinctive results within the current study of low participant exchange ideology and high engagement and social support perceptions, the relationship among the variables and the influence of exchange ideology on the remaining two variables persists.

The recommendations previously described for the exchange ideology results remain relevant. A tailored response to the characteristics of a specific employee population is the approach recommended. Responding with the job resources and work
characteristics most valued by the employee population can make a positive difference for the employee and the employer.

The following section considers the results of the study, how it relates to prior related research, and possible explanations for the connections among them.

Discussion

Study participants reported a low exchange ideology and moderately high coworker support and engagement. In addition, participants' exchange ideology influenced the relationship between support and engagement. The findings vary from previous research on the influence of exchange ideology (Cropanzano & Mitchell, 2005; Eisenberger et al., 1986; Ladd & Henry, 2000; Redman & Snape, 2005; Saks, 2006; Witt et al., 2001). It is possible the individuals who did not participate in the study may have perceptions quite different from those who did participate, and therefore, the findings are an anomaly. Nevertheless, it is meaningful to suggest possible reasons for the results of the current study.

A number of work environment characteristics may account for the study findings. The nature of the utility industry necessitates a quick and coordinated response to regular service interruptions and other minor utility mishaps (Franson, 2013; Quinlan, 2013). In addition, the service area of the study's utility company experiences storm and hurricane events, requiring not only the response of technical operators and linemen but all available personnel. It is common for employees at all levels of the organization to be activated during storm duty and to use utility company facilities or other employer identified staging areas as emergency housing and operational centers ("Hurricane Sandy," 2013). Employees from all areas of the utility, without regard to job title or place in the organizational chart, are reassigned to work wherever there is a need. For
example, employees may be called upon to distribute water, food, and ice, guard downed wires, provide directions and logistics assistance, work on small construction projects to protect facilities, and serve as call center representatives (Franson, 2013; "Hurricane Sandy," 2013; "Jersey Central," 2013). Utility companies enter into mutual assistance agreements with other utilities, and when severe storms and power disruptions occur, utility workers respond to help sometimes from several states away ("Hurricane Sandy," 2013; "Jersey Central," 2013; Quinlan, 2013). In such a work environment, employees can develop relationships with one another that may not be common in typical work environments. While everyday utility work with electricity, gas, and wastewater operations can be quite dangerous, the hazards are potentially increased during times of outages and stressful work situations. In these situations, employees may learn to rely on each other in meaningful ways, possibly resulting in developing long-term trust and respect, psychological safety, and deep social ties not only as an individual utility but as a member of the utility industry family. Utility employees describe the industry as a family and a team with a strong sense of camaraderie (Bush, 2014; "Beautiful Water," 2010)

A work culture emphasizing community involvement and customer service may also impact the results within a utility company. The sense of pride that occurs when working in a meaningful job is a part of providing basic utility services to a community, particularly in times of disaster, distress, and environmental uncertainty. Utilities are known for supporting their local community through a number of fund raising efforts, charities, educational activities, environmental projects, and community involvement (Blaylock, 2014; Litterski, 2010; "People," 2011). Utilities also assist customers in need of help in paying bills by directing them to social service resources and payment arrangements. It is possible the nature of the work adds to the meaningfulness of the job.
It is also conceivable that as social support increases within a workplace requiring close coordination and coworker reliance, exchange ideology preferences are relaxed. As employees feel psychologically safe and supported within their jobs, their optimism and self-esteem may increase which, in turn, can affect their willingness to try new tasks, think creatively, work safely, and become open to job re-design and flexible work arrangements. Such increases in personal and job resources can initiate the cycle toward increased engagement and work performance regardless of exchange ideology.

The nature of utility work as well as cultural and work characteristics may account for the study results. Perhaps the factors affected study participants' perceptions of job and personal resources thereby, increasing motivation to achieve work goals and work engagement (Xanthopoulou et al., 2007, 2009a). The work characteristics may also have influenced perceptions of coworker social support and work engagement while at the same time shaping a lower preference for equity in work relationships. Without further research, it is not possible to clearly answer the questions on order of influence and relationship and the study's results regarding exchange ideology.

Limitations of the Study

Validity is defined by Shadish et al., (2002) as the "approximate truth of an inference" (p. 34). Research allows judgments to be made only to the extent relevant evidence supports the judgment as true or correct (Shadish et al., 2002). A number of threats within the study exist with the potential to affect the relationships among variables and are described below.

While the study investigated the relationships between variables and the impact an additional variable has on the relationships, there was no intention to determine or assess causality. Even though the relationship between engagement and coworker social
support was confirmed in the current study, it was possible study participants were more motivated to complete surveys, experienced higher work engagement, perceived stronger coworker relationships, or had lower exchange ideologies than employees who did not participate in the survey. Therefore, caution must be exercised in generalizing the results of the study to a larger population and concluding causality from correlational results.

A study lacking an adequate sample size may provide incorrect conclusions related to relationships as they exist in the population (Shadish et al., 2002). In the study, the sample size calculator for the actual population size of two hundred and six at the time of survey administration indicated a required sample of 135 surveys. As previously described, 124 surveys were collected, and only 119 were usable. Despite the pre-survey communication efforts, use of a neutral survey administrator, and gift card incentives, the number of surveys received did not meet the required 135 surveys needed to achieve a 5% margin of error. Therefore, the response rate was a potential threat to the validity of the results.

The surveys were administered in different settings (i.e., break rooms and conference rooms) and at two different company locations. Even though differences in setting and location exist, there was consistency, similarity, and overlap in the job classifications, work tasks, procedures, equipment, and physical layout of the buildings. Pre-survey communication and survey administration techniques were the same for all potential participants. Even so, the differences in respondents at the two locations and the setting could impact the ratings and pose a validity threat.

The surveys were administered on three separate days at two different locations. The administration decisions were made to accommodate the varying shifts, work demands, and leave privileges of employees at the utility company. Participants were
notified in advance of the days and times the surveys would be available for completion
through paycheck inserts and flyers. It was possible participants discussed the survey
from one day to the next with other participants, and the discussion, in some way,
influenced the individual ratings across survey administration days and locations
resulting in a validity threat.

Potential participants in the study were notified of the opportunity to volunteer to
complete the paper based survey. Randomly assigning participants eliminates selection
bias (Shadish et al., 2002). In the current study, individuals were not randomly selected
nor were they forced to complete the survey. While the lack of random assignment
caus[ed] a potential validity threat, the sample demographics of age and gender were
similar to the overall population demographics.

Each variable in the study was measured once using previously validated survey
questions. Measuring variables once with only one method could lead to mono-operation
bias or common method variance (Shadish et al., 2002). The decision to measure the
variables in the same way with one method presented the possibility of a potential error
contaminating the three measures in a similar way such that a correlation between two
measures might be due to the fact that both derive from the same source rather than a
credible relationship between them (Rothbard, 2001; Spector, 1987). Some suggest
common method variance might be more of a problem with single items or poorly
designed scales and less of a problem with well designed multi-item validated scales
(Lashinger et al., 2001; Spector, 1987). While the variables could be measured with
other means and in other settings, specific decisions were made in the study for using the
questions, setting, and administrative procedures suitable for the objectives presented.
Nevertheless, the decision to measure the variables with one method was a threat to the validity of the results.

The setting of the study was the researcher's place of employment. Even though the researcher did not personally administer the survey and all surveys were anonymous with no participant identification information, it was possible individuals might have altered their responses or failed to provide honest responses based on perceived expectations or the opportunity to win a $25 gift card. The setting posed a potential validity threat to the survey results.

The results found in the research study were limited due to the characteristics of the setting and study design. Additional studies may expand the research to include different settings, qualitative and quantitative data, and additional constructs to increase the potential for external validity of the research as well as a better understanding of the reasons for the relationships between the variables.

Implications for Further Research

While the results of the current study provide additional insight into the potential variables capable of influencing work engagement, there are a number of opportunities to further advance knowledge and understanding with further research. Within the parameters of the current study's methodology, it is possible to enhance the mode of survey administration to allow for computer based and mailed surveys. Increasing the time window for completing the surveys from three days might also be effective. Providing multiple opportunities and means to supply the survey ratings can potentially increase the response rate and generalizability of the findings. Another potential for further analysis is to duplicate the study in other settings, occupations, and work environments with larger samples to determine if the results of the current study are
unique to the sample surveyed. Depending on the outcome of the additional research, stronger conclusions can be drawn on the influence of exchange ideology on coworker social support and work engagement. Replicating the study within other utilities as well as other organizations where safety factors are high and there is a strong culture of public service (e.g., police and fire service) will advance the knowledge obtained on the topic of engagement, support, and exchange ideology.

Additional statistical tests and analysis would provide more data to further understand the influence of exchange ideology on coworker social support and work engagement. These may include: categorizing exchange ideology into high-medium-low and using regression to analyze its ability to moderate the relationship between the two variables; analyzing the differences in variable ratings between the two locations or across gender, age, and occupation; conducting longitudinal studies to analyze ratings over a period of time; conducting experimental studies which might include an intervention or other practice to influence coworker support and work engagement between a control group and an experimental group; and employing a mixed methods technique to follow up the quantitative gathering of survey data with qualitative interviews. The addition of any of the aforementioned actions would provide additional understanding of the antecedents of work engagement.

While much has been written about work engagement, there is a need for additional research on the value of peer relationships and the effects on job resources such as coworker social support. Job resources are a key component of the JD-R model and the power of social exchange within coworker as well as supervisory relationships have the potential to influence work engagement and overall productivity and profitability of companies (Bakker et al., 2003a; Bakker et al., 2004; Crawford et al.,
As employees are empowered and engaged, positive spiral gains are achievable to further increase job and personal resources and start the cycle over again (Bakker & Demerouti, 2008). Understanding this positive spiral gain between exchange ideology and social support and how the variables impact resources such as optimism, self-efficacy, self-esteem, work flexibility, learning opportunities, and job design holds promise for future research.

With additional research, a clearer picture of social exchange can be created to provide practical recommendations for supervisors and managers. As a result, supervisors can work to create and to sustain work characteristics offering the opportunity for social exchange, community, interdependence, and support. Ultimately, work engagement is a long term and broad strategy for organizations involving all levels of the organizational chart, from employee to management (Frank, Finnegan, & Taylor, 2004). Appreciating the role of each individual in improving and advancing the benefits of an engaged workforce is worthy of additional consideration.

**Summary**

The engagement literature is extensive and presents varying definitions and models for consideration as well as many suggestions for improving engagement levels. Notwithstanding the efforts and expenditures to increase engagement, companies continue to lose money and productivity gains because the workforce is stressed and disengaged. (Coffman & Gonzales-Molina, 2002; ComPsych, 2010; Hollon, 2012). The current study focused on one of many job resources, coworker social support, to explore the relationship with work engagement as well as exchange ideology's potential influence on the relationship.
A cross-sectional, non-experimental, descriptive study design was used and paper-based surveys were administered at one point in time to collect data on the three variables: work engagement, coworker social support, and exchange ideology. The data were analyzed, and positive relationships were found between work engagement and coworker social support while exchange ideology was negatively related to both variables. In addition, exchange ideology was found to influence the relationship between work engagement and coworker social support. A number of potential reasons for the results of the study were offered, primarily centering on work characteristics creating a psychologically safe environment for employees to support each other and shaping a lower preference for equity in work relationships.

Further study and increased sample size was suggested with other utilities as well as other public safety oriented organizations. Using the same methodology but different survey administration techniques might offer an increased sample size and more robust data from which to propose conclusions. Using the same sample data but different statistical tests such as regression and comparing results across age, gender, occupation, and location was also recommended. In addition, other methodologies such as longitudinal, experimental, and mixed methods research would extend an understanding of the variable relationships.

While previous engagement studies have emphasized the supervisory and employee relationship, there has been limited consideration of relationships between peer employees and the subsequent effects of that relationship on engagement. With the increase in team based work and flatter organizational structures, there is a need for further exploration of how social structures and relationships impact the workplace and levels of work engagement (Chiaburu & Harrison, 2008; May et al., 2004; Richardsen et
al., 2006; Schaufeli & Bakker, 2004). While the current study has built upon and added to existing research and theory, there is room for additional investigation of the role of social support in work engagement, how individual employee and work characteristics impact the variables, and in what order. Using different research methods, samples, and statistical tests, there is an opportunity for a more comprehensive understanding of engagement, the effects of potential antecedents to engagement, as well as the role of other variables to influence both.

Individuals often find a state of obligation to others highly disagreeable (Cialdini, 2007). Yet, reciprocal relationships resulting in obligations are exceedingly valuable within the human social system as a stabilizer and an all purpose moral cement (Cialdini, 2007; Gouldner, 1960), a valuable job resource capable of impacting engagement and reducing stress (May et al., 2004; Richardsen et al., 2006; Schaufeli & Bakker, 2004). The value of relationships, social exchange, and reciprocity was supported in this study with a positive correlation and shared variance between coworker social support and work engagement. In regards to exchange ideology, other studies (Eisenberger et al., 1986; Ladd & Henry, 2000; Witt, 1991b; Witt et al., 2001) found the strength of an employee's exchange ideology influenced work effort, the relationship between perceived organizational support and absenteeism, and organizational citizenship behaviors. Within the context of the current study, individual exchange ideology was low and had a negative relationship to coworker social support and work engagement. A number of potential reasons for the results were offered centering on work environment, job resources, and the nature of utility work.

Considering this research in relation to previous studies, there is reason to believe, regardless of a high or low exchange ideology, employees can be engaged and feel
supported by their coworkers. Nevertheless, exchange ideology has value within the context of work as it was negatively related at a statistically significant level to engagement and coworker social support while influencing the relationship between these two variables in the study. Perhaps a particular focus on creating and maintaining a work environment conducive to positive social relationships with the provision of additional job resources related to increased work engagement regardless of exchange ideology would be the better course of action.

There is considerable promise in further exploration of these concepts. By integrating and expanding previous studies with a closer analysis of the drivers behind reciprocal relationships within the workplace, benefits can be realized for the employer and the employee in all types of work environments.
APPENDIX A

UTRECHT WORK ENGAGEMENT SURVEY SHORTENED VERSION (UWES-9)

Work and Well-being Survey (UWES) ©

The following 9 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write “0” (zero) in the space preceding the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way.

<table>
<thead>
<tr>
<th>Almost never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Never</td>
<td>A few times a year or less</td>
<td>Once a month or less</td>
<td>A few times a month</td>
<td>Once a week</td>
<td>A few times a week</td>
</tr>
</tbody>
</table>

1. _____ At my work, I feel that I am bursting with energy
2. _____ At my job, I feel strong and vigorous
3. _____ I am enthusiastic about my job
4. _____ My job inspires me
5. _____ When I get up in the morning, I feel like going to work
6. _____ I feel happy when I am working intensely
7. _____ I am proud of the work that I do
8. _____ I am immersed in my work
9. _____ I get carried away when I'm working

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_____ Supervisor’s Unique Identifier
APPENDIX B

RESEARCH SURVEY

Thank you for participating in this important survey designed to more fully understand the factors impacting work engagement. The survey should take between 10 and 15 minutes to complete. There are a total of 26 questions and four sections in this survey. The survey administrator is available to answer any questions you might have. Once you have completed the survey, please turn it in to the survey administrator and take a ticket for the upcoming $25 gift card drawing. You have 4 chances to win.

Your participation is completely voluntary. Please answer honestly and openly. Results will be completely anonymous. Individuals and departments will not be identified. You may withdraw from this study at any time without penalty or prejudice.

This study is conducted by Sharon S. Cureton, student at the University of Southern Mississippi. This study is being done as part of the requirements for completing the researcher's PhD. The results from the surveys will be used to write the dissertation paper whose purpose is to understand work engagement.

Once again, your participation is appreciated. Don't forget to get your ticket and qualify for one of the four $25 gift cards!
SECTION ONE:
The following 9 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write "0" (zero) in the space preceding the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way.

<table>
<thead>
<tr>
<th></th>
<th>Almost Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>A few times a year or less</td>
<td>Once a month or less</td>
<td>A few times a month</td>
<td>Once a week</td>
<td>A few times a week</td>
<td>Every day</td>
</tr>
</tbody>
</table>

1. ______ At my work, I feel that I am bursting with energy
2. ______ At my job, I feel strong and vigorous
3. ______ I am enthusiastic about my job
4. ______ My job inspires me
5. ______ When I get up in the morning, I feel like going to work
6. ______ I feel happy when I am working intensely
7. ______ I am proud of the work that I do
8. ______ I am immersed in my work
9. ______ I get carried away when I'm working

This is the end of Section One Questions. Turn the page to answer Section Two Questions.
SELECTION TWO:
Listed below are statements that represent possible opinions that YOU may have about the level of coworker support you receive. Please indicate the degree of your agreement or disagreement with each statement by writing the number (from 1-7) that best represents your point of view about the level of support you receive from your coworkers. Please choose from the following answers:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Moderately Disagree</td>
<td>Slightly Disagree</td>
<td>Neither Disagree or Agree</td>
<td>Slightly Agree</td>
<td>Moderately Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

10. ______ My coworkers are supportive of my goals and values.
11. ______ Help is available from my coworkers when I have a problem.
12. ______ My coworkers really care about my well-being.
13. ______ My coworkers are willing to offer assistance to help me perform my job to the best of my ability.
14. ______ Even if I did the best job possible, my coworkers would fail to notice.
15. ______ My coworkers care about my general satisfaction at work.
16. ______ My coworkers show very little concern for me.
17. ______ My coworkers care about my opinions.
18. ______ My coworkers are complimentary of my accomplishments.

This is the end of Section Two Questions. Turn the page to answer Section Three Questions.
SECTION THREE:
Listed below are statements that represent possible opinions that YOU may have about your work effort in relation to how your coworkers treat you. Please indicate the degree of your agreement or disagreement with each statement by writing the number (from 1-7) that best represents your point of view about your work effort in relation to coworker treatment. Please choose from the following answers:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Moderately Disagree</td>
<td>Slightly Disagree</td>
<td>Neither Disagree or Agree</td>
<td>Slightly Agree</td>
<td>Moderately Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

19. ______ Your willingness to help your coworkers should depend partly on their behavior toward you.

20. ______ An employee who is treated badly by his/her coworkers should reduce how much he/she does for them.

21. ______ How much you help your coworkers should not depend on how they treat you.

22. ______ An employee's effort to assist his/her coworkers should have nothing to do with how much they assist him or her.

23. ______ The failure of your coworkers to appreciate your assistance should not reduce your willingness to offer help.

This is the end of Section Three Questions. Turn the page to answer Section Four Questions.
SECTION FOUR:
The developer of the work engagement survey (UWES), Wilmar Schaufeli, requires three pieces of demographic data in exchange for using the questions for research purposes. Dr. Schaufeli will add these data to his international database and use them only for the purpose of further validating the UWES. This data is not being used in the current research. Please write in your age for question 24 and place a check mark by the answer that describes you for questions 25 and 26.

24. What is your age?

_____  

25. What is your gender?

_____ Male  
_____ Female  

26. What is your occupation? (please check one)

_____ Blue collar  
_____ White collar  
_____ Professional  

Thank you for your time and for completing this survey.

Your opinions are valuable to this research project.
Dear Sharon,

Thanks for your interest in my work.

You may use the UWES for your academic studies, and you interpreted the conditions on my website well.

Good luck with your project.

With kind regards,

Wilmar

Dr. Schaufeli,

I am a doctoral student at the University of Southern Mississippi. My research topic is "The role of individual exchange ideology on work engagement and coworker social support".

I would like to use the UWES in my study to assess work engagement levels. I have reviewed your website and spoken with a recent graduate of our program that also used the UWES. It is my understanding that I will need to forward a copy of my data to you after the study is completed and follow the test manual guidelines. If there is anything else I need to know or do in order to use this instrument, please forward the details.

I look forward to hearing from you soon.

Thank you,
RE: Measurement instruments: Survey of Perceived Coworker Support and Survey of Individual Exchange Ideology

From: Eisenberger, Robert W <reisenbe@central.uh.edu>
To: curetons<curetons@aol.com>
Subject: RE: Measurement instruments: Survey of Perceived Coworker Support and Survey of Individual Exchange Ideology
Date: Wed, Dec 5, 2012 4:30 pm

Dear Sharon,

The coworker support scale has frequently used citing my work and so I can give you permission to use it. I am happy to do so. The individual exchange ideology scale is derived from my exchange ideology scale. It is unclear whether I can give you permission to use that scale. I am unable to provide you with contact information for these authors.

Cordially,
Bob
Robert Eisenberger
Professor of Psychology
College of Liberal Arts & Soc. Sciences
Professor of Management
C. T. Bauer College of Business
University of Houston
reisenberger2@uh.edu
(302)353-8151

From: curetons@aol.com [curetons@aol.com]
Sent: Monday, December 03, 2012 7:06 PM
To: reisenberger2@uh.edu
Subject: Fwd: Measurement instruments: Survey of Perceived Coworker Support and Survey of Individual Exchange Ideology

Dr. Eisenberger,

I am a doctoral student at the University of Southern Mississippi. My research topic is "The role of individual exchange ideology on work engagement and coworker social support". I would like to use a revised version of your Perceived Organizational Support and Organizational Exchange Ideology scales to gather data on coworker support and individual exchange ideology. Ladd and Henry (2000) revised the scales and used them as measurement devices in their research article "Helping coworkers and helping the organization: The role of support perceptions, exchange ideology, and conscientiousness".

As you can see below, I have attempted to contact Dr. Henry but the email was returned. I have been unable to locate a more current email address for Dr. Henry or for Deborah Ladd.

Therefore, I wanted to contact you to see if I could obtain permission to use revised versions of the scales and if you knew how I might contact the other researchers.

Any help you could provide would be most appreciated.

Thank you in advance,
Sharon Cureton
Doctoral student
University of Southern Mississippi
Contact information:
28807 Dogwood Court
Daphne, AL 36526
251-625-4893 home phone

http://mail.aol.com/37242-111/aol-6/en-us/mail/PrintMessage.aspx 12/5/2012
APPENDIX D

PRE-SURVEY COMMUNICATION PAYCHECK INSERT

Coming Soon!

Research Survey

Sharon Cureton is required to perform a survey as part of her research necessary to complete her PhD in Human Capital Development from the University of Southern Mississippi. This paper survey will be administered on-site the week of ______________, 2013. Although this survey is not a part of ______________’s ongoing strategic planning, we will receive summary information, without individuals identified. We hope this information will help us better understand work characteristics of our employees. Therefore, management has approved the conducting of this survey during normal work hours. Your participation is voluntary and your responses are anonymous.

A survey administrator will be available at your division to give out the survey to employees who have worked for at least one year with _____. If you complete a survey, you will be placed in a drawing for one of four $25 gift cards. If you have any questions, please feel free to call Sharon Cureton at ______.


Want a chance to win a $25 gift card?

Do you have 10 minutes to complete a quick survey?

Would you complete a short survey that is part of a research study required for Sharon Cureton's coursework? The survey will be distributed during the week of ____________________, 2013. Your opinion is important and would be greatly appreciated.

The schedule below shows when the survey administrator will be available to distribute the survey. You may complete the survey during any of the dates and times listed below. The survey should take between 10 and 15 minutes to complete.

If you have been a _____ employee for at least a year, you are eligible to participate and you will be given a double sided ticket to place you in a drawing for one of four $25 gift cards. Your participation is voluntary and all responses are anonymous. If you have any questions, you may contact Sharon Cureton at _____________.

<table>
<thead>
<tr>
<th>Date</th>
<th>Division</th>
<th>Location</th>
<th>Time(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>___, 2013</td>
<td>Eastern</td>
<td>2nd floor Training Room</td>
<td>11:30 - 1:00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gas/Water Break Room</td>
<td>9:30 - 10:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electric Break Room</td>
<td>3:00 - 3:30</td>
</tr>
<tr>
<td>___, 2013</td>
<td>Eastern</td>
<td>2nd floor Training Room</td>
<td>9:30 - 10:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gas/Water Break Room</td>
<td>11:30 - 12:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electric Break Room</td>
<td>3:00 - 3:30</td>
</tr>
<tr>
<td>___, 2013</td>
<td>Western</td>
<td>1st floor Conference Room</td>
<td>9:30 - 10:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electric Break Room</td>
<td>11:30 - 12:30 and 3:00-3:30</td>
</tr>
</tbody>
</table>
MEMO FROM GENERAL MANAGER TO ALL EMPLOYEES

Date

Dear __________ employee,

Your opinions are needed for a research study being conducted by Sharon Cureton as part of the school requirements at the University of Southern Mississippi. The survey takes no more than 10-15 minutes to complete and places you in a drawing to win one of four $25 gift cards.

Your participation is voluntary and all responses are anonymous. I have given permission for this study and would appreciate your participation. The results will be helpful to Sharon's research and will also provide summary information to our company. Individuals who have worked here for at least one year are eligible to participate.

A survey administrator will be on site on the following days to oversee survey completion. If you have any questions or concerns, please contact Sharon at __________.

<table>
<thead>
<tr>
<th>Date</th>
<th>Division</th>
<th>Location</th>
<th>Time(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>___, 2013</td>
<td>Eastern</td>
<td>2nd floor Training Room</td>
<td>11:30- 1:00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gas/Water Break Room</td>
<td>9:30 - 10:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electric Break Room</td>
<td>3:00 - 3:30</td>
</tr>
<tr>
<td>___, 2013</td>
<td>Eastern</td>
<td>2nd floor Training Room</td>
<td>9:30 - 10:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gas/Water Break Room</td>
<td>11:30 - 12:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electric Break Room</td>
<td>3:00 - 3:30</td>
</tr>
<tr>
<td>___, 2013</td>
<td>Western</td>
<td>1st floor Conference Room</td>
<td>9:30 - 10:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electric Break Room</td>
<td>11:30 - 12:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&amp; 3:00 - 3:30</td>
</tr>
</tbody>
</table>

Sincerely,

General Manager
APPENDIX E
SURVEY ADMINISTRATION POTENTIAL QUESTION AND ANSWERS

Note: Instructions for completing the survey are provided within each paper survey packet. Participants will have the opportunity to complete the paper survey at various times during the administration week. Prior to handing out a survey, the administrator will confirm the employee has worked for at least one year with the utility. Questions and answers related to the research study are given below and will be used by the test administrator in response to any participant inquiries.

Q  What is the purpose of the study?
A  The purpose of the study is to determine the relationship between coworker social support, work engagement, and exchange ideology.

Q  Why is the study being done?
A  The study is a partial fulfillment of the requirements for the researcher's PhD in Human Capital Development from the University of Southern Mississippi.

Q  How will the study results be used?
A  The study's results will provide information on work engagement. The results will be described in the researcher's dissertation in summary fashion. No specifics related to the company, department, or employees will be provided.

Q  Will my answers be given to my organization?
A  Results will be presented in summary form only in the final dissertation. Your specific answers will not be connected to you as all survey responses are anonymous. Your personal responses are confidential. You will not provide your name on the survey and your name is not connected to your responses in any way. There will be no link between your survey responses and you personally.
Q What are the benefits to my participation?
A All participants are eligible for four $25 gift card drawings. In addition, as more individuals participate in the survey, stronger support is provided for the conclusions.

Q What are the risks to my participation?
A There are no expected risks to your participation. This project has been reviewed by the Human Subjects Protection Review Committee to ensure research projects involving human subjects follow certain federal guidelines. Any questions or concerns about your rights as a participant should be directed to the Chair of the Institutional Review Board at ______.

Q Do I have to participate in the survey?
A You may participate of your own free will. You are under no obligation to participate. If you decide at any time you do not want to participate, simply return the survey to the survey administrator and explain you do not wish to participate. If you have questions, you may ask the survey administrator at any time.

Q How long will it take to complete the survey?
A There are a total of 26 questions in the survey. The survey should take between 20 and 30 minutes to complete.

Q What are the tickets for? How will I know if I won?
A The tickets are given to participants who complete the survey. There will be four $25 gift cards drawn from the tickets and winning numbers will be posted on the intranet and on the bulletin boards. Winners can bring their tickets to the receptionist at either location and a gift card will be given to you.

Q Why do I have to provide my age, gender, and occupation?
A  The developer requests demographic information in exchange for the use of the work engagement scale. The demographic data will not be analyzed for the research study.

Q  Why are the survey forms a different color by location?
A  Survey data from each location will be analyzed independently and in summary to better understand the dynamics of the three variables: work engagement, coworker social support, and exchange ideology.
APPENDIX F

INSTITUTIONAL REVIEW BOARD APPROVAL

THE UNIVERSITY OF
SOUTHERN MISSISSIPPI

INSTITUTIONAL REVIEW BOARD
118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.6820 | Fax: 601.266.4377 | www.usm.edu/irb

NOTICE OF COMMITTEE ACTION

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

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the “Adverse Effect Report Form”.
- If approved, the maximum period of approval is limited to twelve months.

Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 13051301
PROJECT TITLE: The Role of Exchange Ideology in Co-Worker Social Support and Work Engagement
PROJECT TYPE: Dissertation
RESEARCHER(S): Sharon Cureton
COLLEGE/DIVISION: College of Science and Technology
DEPARTMENT: Economic and Workforce Development
FUNDING AGENCY/SPONSOR: NIA
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 06/11/2013 to 06/10/2014

Lawrence A. Hosman, Ph.D.
Institutional Review Board
### APPENDIX G

#### CODEBOOK FOR RESEARCH PROJECT

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Variable label</th>
<th>Values: Labels and codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location_one_two</td>
<td>Location of participant</td>
<td>Location one or location two</td>
</tr>
</tbody>
</table>
| Survey_Number       | Survey Number                   | 3 digit ID; location and survey ID number  
D=Location one  
F=Location two  
Number-Survey ID Number |
| Engagement_Rtg_Q1   | Engagement Rating for Question 1 to Questions 9 | Engagement Rating; 0-6  
0=Never  
1=A few times a year or less  
2=Once a month or less  
3=A few times a month  
4=Once a week  
5=A few times a week  
6=Every Day  
Use 99 if no data |
| Average_Eng_Rtg     | Average Engagement Rating by participant | Average of ratings from questions 1-9 rounded two decimals |
| CSS_Q1              | Coworker Social Support Rating for Questions 10-18 | Coworker Social Support Rating; 1-7  
1=Strongly Disagree  
2=Moderately Disagree  
3=Slightly Disagree  
4=Neither Disagree or Agree  
5=Slightly Agree  
6=Moderately Agree  
7=Strongly Agree  
Use 99 if no data |
| Average_CSS_Rating  | Average Coworker Social Support Rating by participant | Average of ratings from questions 10-18 rounded two decimals |
| EIQ1                | Exchange Ideology Rating for Questions 19-23 | Exchange Ideology Rating; 1-7  
1=Strongly Disagree  
2=Moderately Disagree |
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg_EL_Rating</td>
<td>Average Exchange Ideology rating by participant</td>
<td>Average of ratings from questions 19-23 rounded two decimals</td>
</tr>
<tr>
<td>AGE</td>
<td>Age</td>
<td>2 digit age of survey participant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use 99 for no data or if participant listed other data such as an age range</td>
</tr>
<tr>
<td>GENDER</td>
<td>Gender of survey participant</td>
<td>Gender of survey participant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1=Male</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2=Female</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use 99 for no data</td>
</tr>
<tr>
<td>OCCUP</td>
<td>Occupation</td>
<td>Occupation category of survey participant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1=Blue Collar</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2=White Collar</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3=Professional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use 99 for no data or if multiple occupational categories were checked</td>
</tr>
</tbody>
</table>

Legend:
- 3=Slightly Disagree
- 4=Neither Disagree or Agree
- 5=Slightly Agree
- 6=Moderately Agree
- 7=Strongly Agree
- Use 99 if no data
REFERENCES


Kollock, P. (1994). The emergence of exchange structures: An experimental study


Macey, W. H., & Schneider, B. (2008b). Engaged in engagement: We are delighted we did it. *Industrial and Organizational Psychology, 1*(1), 44-47.


People Just Want to be Here. (2011). *Public Power, 69*(7), 31-34.


Stamford, CT: Author.


Van Veldhoven, M., & Meijman, T. F. (1994). *Het meten van psychosociale arbeidsbelasting met een vragenlijst: De vragenlijst beleving en beoordeling van de arbeid* [The measurement of psychosocial strain at work: The questionnaire experience and evaluation of work]. Amsterdam, Netherlands: NIA.


