

**THE INTERACTION BETWEEN ATTACHMENT STYLES, LEADERSHIP STYLES
AND INFORMATION TECHNOLOGY MIDDLE-MANAGERS' PERCEPTION OF
EMPLOYEES' EFFECTIVENESS**

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Abstract

Prior research has shown both attachment style and leadership style can influence how subordinates view the effectiveness of their leaders. However, there is a critical gap in the literature from the leaders' point of view. Further, middle managers, particularly in the IT realm have not been adequately represented in attachment theory or leadership theory research. Considering the importance of IT professionals in today's global economy and the unique role of IT middle-managers who serve as liaisons between IT staff and business teams within organizations, Industrial Organizational Psychologists need a more complete understanding of this population to have an impact on leader effectiveness. In addition, because IT middle-managers are generally responsible for performance appraisals and research has suggested poor performance appraisals are strong demotivators for IT staff, it would serve organizational leaders well to identify elements outside of employees' performance that affect their performance ratings. There were three research questions posed in this study. First, when leadership style is held constant, do significant differences exist in IT middle-managers' perception of their employees' effectiveness based on attachment style? Secondly, when attachment style is held constant, do significant differences exist in IT middle-managers' perception of their employees' effectiveness based on leadership style? Thirdly, does a significant interaction occur between attachment style and leadership style in effecting IT middle-managers' perception of employees' effectiveness? This quasi-experimental study used a two-way factorial ANOVA and focused on two leadership styles, transformational and transactional as measured by the Leadership Self-Report Scale (LSRS), and three types of attachment, secure, avoidant, and anxious as measured by the Employee Assessment Scale (EAS). Data were collected via online surveys for 100 IT middle-managers within the United States. Results showed there were no significant differences

in IT middle-managers' perception of their employees' effectiveness based on IT middle-managers' attachment style when their leadership style was held constant, and there were no significant differences in IT middle-managers' perception of their employees' effectiveness based on IT middle-managers' leadership style when their attachment style was held constant. In addition, the interaction between IT middle-managers' attachment style and their leadership style did not add predictive value to how IT middle-managers would rate their employees' effectiveness. Recommendations are made for organizational leaders and researchers to conduct further research on effective IT management.

Dedication

I dedicate this dissertation first and foremost to my heavenly Father, Jehovah, the Lord of Hosts, and to my personal savior, Jesus Christ, without whose grace none of this would have been possible. Secondly, to my daughters, Naomi Jamille and Maria Magdalena, who believed in me and cheered me on through this journey. Thirdly, to my five precious grandchildren, S. Diego, Skyler, Charlee, Nahla, and Ezequiel, whose smiles and laughter bring me so much joy and whose presence on this earth motivate me to be the best I can be so that I can be an example to them that they might reach for the stars. Finally, to my extended family and friends who offered their support with encouraging words and prayer.

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CHAPTER 1. INTRODUCTION

No man is an island, entire of itself; every man is a piece of the continent, a part of the main

—Donne, 1572/1631

Humans have realized instinctively the need for affiliation is part of survival. When infants are born, they are incapable of taking care of themselves; thus, they seek support from a caregiver, and so begins a care-seeking/care-giving relationship, which has become the topic of research since the early 20th century when Freud started researching parent/child relationships and how they affected personality development. Bowlby, who was influenced by Freud's psychoanalytical theories, began research on parent/child relationships and from his research, attachment theory started taking shape (Weizmann, 2001). Bowlby (1982) recognized individuals develop internal working models of self and others based on early attachment experiences that individuals carry throughout their lifespan.

Attachment theory research has expanded into the workplace. The existing research on attachment theory and workplace relationships has suggested there is a correlation between the two (Richards & Hackett, 2012). Researchers have also shown interest in examining correlations between attachment styles and leadership styles. It has become evident to many researchers that leadership is much too complex to attempt to explain it without examining different aspects of human behavior of which the attachment behavioral system is one. Combining attachment theory and leadership theory in organizational research has gained popularity in recent years. Studies have examined a variety of constructs including, whether attachment styles could predict

leadership styles (Bresnahan & Mitroff, 2007; Keller & Cacioppe, 2001; Manning, 2003); if attachment styles have an effect on leader/subordinate relationships (Richards & Hackett, 2012); if attachment style could influence subordinates' perception of their leaders (Berson, Dan, & Yammarino, 2006); or if attachment styles could predict leaders' effectiveness (Geller & Bamberger, 2009; Maysel, 2010).

The topic of the present study was attachment theory in the workplace. Specifically, the research focused on whether leaders' attachment styles could make a difference on how leaders perceive their subordinates. In addition, the research looked at leaders' perception of subordinates' effectiveness based on leaders' leadership style. Finally, the researcher considered whether a combination of attachment style and leadership style had any predictive value in determining leaders' perception of employees' effectiveness. The first order of business was to explain the need for this study, which is covered in Chapter 1 by providing a background and statement of the problem as well as the purpose and significance of the study. There are three research questions that are listed in Chapter 1, each with the hypothesis and null hypothesis stated. In addition, Chapter 1 provides a definition of terms used throughout this paper. Furthermore, the research design, which was quasi-experimental with nonrandom assignment of participants using a two-way analysis of variance is described in detail. As with any study there are assumptions made as well as limitations, both which are covered in detail in Chapter 1.

Background of the Problem

To understand the issue of IT middle-managers' perception of employees' effectiveness, this research used attachment style theory as well as transformational and transactional leadership style theory. Keller and Cacioppe (2001) argued secure and insecure attachments formed in early childhood carry into adult relationships, including workplace relationships. In

addition, some studies have suggested individuals with insecure attachment styles tend to gravitate towards computer science careers (Ein-Dor, Reizer, Shaver, & Dotan, 2012).

Furthermore, researchers found some evidence showing certain attachment styles could make for better leaders. For example, Manning (2003) asserted securely attached individuals are more likely to be transformational leaders. Conversely, individuals with insecure attachment styles may not make good leaders because they lack the interpersonal, cognitive, and emotional capacity needed to meet the everyday challenges of the workplace effectively (Bresnahan & Mitroff, 2007).

Research has suggested attachment styles influence the way individuals process and communicate information (Little, Nelson, Wallace, & Johnson, 2011). Communication is a circular process that involves cognitive and behavioral skills as well as self-reflection (Astbury, 2008), and it is a key skill for any level of management. Reich and Benbasat (2000) noted one of the most important factors in aligning information technology (IT) with business strategies is communication. Moreover, IT middle-managers have a distinct role of bridging communication between the organization's business staff and the IT workers (Kakabadse & Korac-Kakabadse, 2000). When communicating in any type of setting, it is imperative to remain composed and even more so, in a business setting. Generally, securely attached individuals can see the positive side of things and are more capable than the insecurely attached of keeping their emotions in check in difficult circumstances, which allows securely attached individuals to manage the situations more successfully (Little et al., 2011).

Timmerman and Emmelkamp (2006) explained infants develop internal working models of self and others based on their experiences with primary caregivers. They went on to say individuals' feelings and behaviors later in life are influenced by these internal models. Internal

models of self and others affect perception. For instance, individuals who are anxiously attached have a negative view of others as well as a negative view of self (Boatwright, Lopez, Sauer, VanDerWege, & Huber, 2010). On the opposite side of the spectrum are securely attached individuals who have a positive self-view and a positive others-view (Boatwright et al., 2010). On the other hand, the avoidantly attached will have a positive self-view but a negative view of others (Boatwright et al., 2010). Therefore, it is quite possible the employees could receive a negative evaluation from one evaluator, but if the employees were evaluated by a different person for the same work, they could be rated very differently depending on the evaluators' internal working model. Moreover, Longenecker and Gioia (2001) asserted 40% of managers manipulate employee performance ratings based on their like or dislike of their subordinates. Du Plessis and Van Niekerk (2017) found there are many factors unrelated to true performance that affect how managers rate their employees and advised more research needs to be conducted to identify and address these factors. To date, there appears to be no research addressing fairness of leaders' evaluation of employees based on leaders' personal styles whether it be leadership or attachment. Beyond the attachment and leadership studies that have identified subordinates' perception of leaders' effectiveness, no one has investigated the degree of impartiality of leaders' evaluation of employees regardless of leaders' leadership or attachment style.

IT middle-managers serve a vital function within organizations. This study focused on IT professionals because there is some evidence that supports insecurely attached individuals are more prone than those who are securely attached to seek IT careers (Ein-Dor et al., 2012). There is also evidence supporting insecurely attached individuals tend to perceive others more negatively than the securely attached (Boatwright et al., 2010). The present study explored the attachment styles and leadership styles of IT middle-managers in relation to how IT middle-

managers perceive their employees' effectiveness. It would add to the I/O psychology field to understand whether attachment styles and leadership styles interact to influence leaders' perception of employees' effectiveness. In addition, having this knowledge could benefit those tasked with designing leadership-training programs and could encourage them to consider attachment styles as part of self-awareness training for IT middle-managers.

Statement of the Problem

Individuals develop secure or insecure attachments that they carry from childhood experiences into workplace relationships (Bresnahan & Mitroff, 2007; Keller & Cacioppe, 2001; Manning, 2003; Sigalit & Mikulincer, 2009). Although attachment styles are not a constant, individuals have a predominant attachment style that remains stable (Richards & Schat, 2011). In addition, some studies have suggested a connection between attachment styles and leadership styles (Popper, Mayseless, & Castelnovo, 2000). Furthermore, internal models of self and others (positive/negative) propose adults with secure or anxious attachment have a positive view of others whereas adults with avoidant attachment have a negative view of others (Boatwright et al., 2010). Research has also shown individuals with avoidant attachment are prone to seeking computer science careers (Ein-Dor et al., 2012). However, previous research has not investigated whether IT middle-managers' attachment style and leadership style can predict how IT middle-managers perceive their employees.

Purpose of the Study

Attachment theory has evolved since Bowlby (as mentioned in Ainsworth & Bowlby, 1991), first developed an interest in how parent/child interactions affected children's personality. Bowlby's research with young children separated from their primary caregivers led him to develop the concept of internal working models of attachment figures and the self (Ainsworth &

Bowlby, 1991). Individuals' attachment behavioral system is a permanent element of human composition and through years of experience becomes more complex and flexible (Sable, 2008). Even so, Sable (2008) pointed out that like children, adults will seek proximity to attachment figures in times of distress.

Researchers have explored attachment in the workplace as it pertains to leaders' behavior (Bresnahan & Mitroff, 2007; Sigalit & Mikulincer; 2009); subordinates' behavior (Keller & Cacioppe, 2001); mentor-protégé dyads (Germain, 2011b); social support (Geller & Bamberger, 2009; Nelson & Quick, 1991); and organizational commitment (Schusterschitz, Geser, Nöhammer, & Stummer, 2011). Hence, it is not a new concept. However, the research has focused on behaviors and interpersonal relationships. This study intended to contribute to workplace attachment theory by examining the differences between attachment styles with respect to IT middle-managers' perception of employees' effectiveness, which helps address a gap in research. Secondly, it investigated whether there is a difference in IT middle-managers' perception of employees' effectiveness based on leadership style. Finally, it evaluated IT middle-managers' perception of employees' effectiveness based on the interaction between attachment and leadership styles. The study fills a gap in the research by identifying areas that could impede fair judgment of employee performance. In addition, this study aimed to offer insight on whether attachment styles or leadership styles influence leaders' demands on employees.

Such an analysis was expected to provide information about whether internal working models of IT middle-managers bias their evaluation of employees. This research was timely and relevant because the world has moved into the Knowledge Era. Most organizations regardless of type of business are dependent on technology. While some organizations outsource their technological needs, others have an internal IT department. In any case, businesses are dependent

on cohesive IT departments to implement their critical organizational initiatives. Building a strong department includes evaluating employees' effectiveness. Badawy (2007) explained one of the biggest demotivators for IT professionals is a performance appraisal system that focuses on personal traits rather than on accomplishments. Therefore, investigating factors that might influence IT leaders' perception of employees' effectiveness could be beneficial. If research finds a connection between leaders' attachment style and their evaluation of employees, it could benefit those tasked with designing leadership training programs to consider incorporating attachment style theory as part of the training to promote self-awareness and encourage leaders to be cognizant of their own potential prejudices when conducting performance reviews. In addition, those responsible for the design of organizations' appraisal systems could consider an appraisal process that would include multiple raters.

Significance of the Study

The present study sought to expand workplace attachment literature to include how attachment styles influence leaders' perception of employees' effectiveness. This study was limited to IT middle-managers. However, the expectation was for future research to include other subgroups. Current attachment style literature suggests a link between attachment styles and the perception of emotional scenes (Vrtička, Sander, & Vuilleumier, 2012) as well as a connection between attachment styles and the perception of others (Mikulincer & Horesh, 1999). Mikulincer and Horesh (1999) argued insecure attachment styles, anxious and avoidant, could bias individuals' perception of others by projecting personal negative traits onto them. Mikulincer and Horesh (1999) limited their research to undergraduate social science students. The present study investigated whether the same bias identified by Mikulincer and Horesh would be carried

into the workplace and would influence IT middle-managers' perception of employees' effectiveness.

In addition to seeking to add relevant information on workplace attachment literature, the present study aimed to expand leadership theories to include differences in leaders' perception of employees' effectiveness based on leadership style, focusing exclusively on IT middle-managers. Numerous studies have added to leadership literature by examining subordinates' perception of their leaders based on leaders' leadership style (Hsu & Chen, 2011; Jayasingam & Cheng, 2009; Swid, 2014). Where some studies suggested a positive relationship between transformational leadership and subordinates' perception of leaders' effectiveness (Hsu & Chen, 2011), other studies showed a positive relationship between both transactional and transformational leadership and subordinates' perception of leaders' effectiveness (Swid, 2014). Conversely, Swid (2014) found a negative linear relationship between Laissez-faire leadership and subordinates' perception of leaders' effectiveness. This study added to leadership literature by investigating whether similar relationships existed between leadership styles and IT middle-managers' perception of employees.

Building upon previous attachment theory as well as leadership theory literature by focusing on a unique population such as IT professionals, was identified as an opportunity to add to the I/O knowledgebase tapped into by those tasked with personnel selection and training within organizations. Additionally, it was proposed that if connections were revealed between IT middle-managers' attachment style and their perception of their employees' effectiveness or connections between IT middle-managers' leadership styles and how they perceive their employees' effectiveness, it could provide additional insight into factors outside of employees'

control that impact employees' performance appraisals, which in turn affect employee growth and motivation and ultimately organizational success.

Research Questions

Three research questions were posed to investigate the interaction between attachment styles, leadership styles, and IT middle-managers' perception of employees' effectiveness. First, the study analyzed whether there were significant differences in IT middle-managers' perception of employees based on attachment styles. Next, the study examined whether there were significant differences in IT middle-managers' perception of employees based on leadership styles. Finally, the study investigated whether an interaction between attachment styles and leadership styles could predict IT middle-managers' perception of employees.

Research Question 1. When leadership style is held constant, do significant differences exist in IT middle-managers' perception of employees' effectiveness based on attachment style?

Null Hypothesis 1. No significant differences exist in IT middle-managers' perception of employee effectiveness based on attachment style when leadership style is held constant.

Alternate Hypothesis 1. Significant differences exist in IT middle-managers' perception of employee effectiveness based on attachment style when leadership style is held constant.

Research Question 2. When attachment style is held constant, do significant differences exist in IT middle-managers' perception of employees' effectiveness based on leadership style?

Null Hypothesis 2. No significant differences exist in IT middle-managers' perception of employee effectiveness based on leadership style when attachment style is held constant.

Alternate Hypothesis 2. Significant differences exist in IT middle-managers' perception of employee effectiveness based on leadership style when attachment style is held constant.

Research Question 2. Does a significant interaction occur between attachment style and leadership style in effecting IT middle-managers' perception of employees' effectiveness?

Null Hypothesis 3. No significant interaction occurs between attachment style and leadership style in effecting IT middle-managers' perception of employees' effectiveness.

Alternate Hypothesis 3. Significant interaction occurs between attachment style and leadership style in effecting IT middle-managers' perception of employees' effectiveness.

Definition of Terms

Adult attachment. Adult relational interactions that possess properties like those found in childhood attachments and are mostly present in pair relationships (Weiss, 1994).

Attachment style. A pattern of proximity seeking behavior developed from infancy and carried throughout the lifespan based on a need for affiliation and survival (Bowlby, 1982).

Information technology. Beynon-Davies (2009) defined information technology as a set of hardware and software tools that read and transmit data. IT middle-managers who will participate in the proposed study have the responsibility of maintaining these artifacts available to customers in full functioning mode. More importantly, the IT middle-managers are responsible for the staff that builds and supports the technology. Research suggests individuals with a predominant avoidant attachment style are often interested in computer science careers (Ein-Dor et al., 2012), which is one of the reasons the proposed dissertation will focus on IT middle-managers.

Internal working models. Mental representations of self and others that develop based on early childhood experiences with primary caregivers and direct feelings and behaviors later in life (Timmerman & Emmelkamp, 2006). Eventually these working models become a part of

individuals' personality, which will guide interactions with others as well as perception of self and others (Mayseless & Popper, 2007).

Laissez-faire leadership. It is the absence of leadership. Leaders are not clear about tasks, avoid making decisions, and abdicate responsibilities (Antonakis, Avolio, & Sivasubramaniam, 2003).

Leadership. Consists of goal setting and the act of influencing individuals to achieve goals as well as encouraging them to grow in their careers (Giltinane, 2013).

Leadership style. A set of characteristics or traits individuals employ when directing and motivating staff to achieve goals and when eliciting effective performance from them (Giltinane, 2013).

Middle-managers. There is no clear definition of a middle-manager, and organizations may not have a job title of middle-manager. However, there is a consensus in existing literature that middle-managers are those who serve as a liaison between senior management and junior staff, with the unique dual responsibility of implementing senior management's strategic plans and exercising control over junior staff (Ekaterini, 2011; Harding, Lee, & Ford, 2014; Krausert, 2014).

Transactional leadership. Has two main components: a performance/rewards system where leaders compensate employees based on task completion and management by exception. That is, corrective criticism, negative feedback, and negative reinforcement, (Bass, & Steidlmeier, 1999).

Transformational leadership. Comprised of four factors: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Antonakis et al., 2003). Characterized by leaders who have charisma, are inspirational, generate awareness

and acceptance of the organizational mission, and move employees away from self-interest and towards focusing on the good of the group (Bass, 1990). Additionally, transformational leaders empower their employees (Popper & Mayselless, 2003).

Research Design

The research design for this quantitative study was quasi-experimental with nonrandom assignment of participants using a two-way analysis of variance. Nonprobability purposive sampling was used. With purposive sampling, there generally is a purpose and a population in mind (Warner, 2013). In this case, the population was very specific; that is, only IT middle-managers were asked to participate. Three variables were measured. First, the categorical independent variable, attachment style (secure, avoidant, and anxious), was measured by the Employee Assessment Scale [EAS] (Germain, 2011a). The second categorical independent variable was leadership style (transformational/transactional). Respondents were asked to respond to the Leadership Self-Report Scale [LSRS] (Dussault, Frenette, & Fernet, 2013). Individuals who fell under the category of Laissez-faire were excluded from the study. The dependent variable was IT middle-managers' perception of employees' effectiveness, which was measured by the Employee Performance Questionnaire [EPQ] (Lynch, Eisenberger, & Armeli, 1999).

Assumptions and Limitations

Assumptions

As with any research, certain assumptions were made including general assumptions, theoretical assumptions, topical assumptions and assumptions about measures.

General assumptions. First and foremost, it was expected participants would answer questions with honesty and integrity. Considering participants are identified as IT middle-

managers, it was also expected participants had more than an eighth-grade level reading comprehension, which would allow them to understand the questions and answer them accordingly. The surveys in this study were all in English; therefore, it was expected participants were fluent in written English.

Theoretical assumptions. There is sufficient evidence in existing literature supporting the attachment behavioral system that starts to take shape from birth becomes a permanent element of human composition, which will direct relational behavior throughout individuals' lifespan (Albert & Horowitz, 2009; Bolen, 2000; Bowlby, 1982; Richard & Schat, 2011). The attachment behavioral system includes internal models of self and others that influence individuals' perception (Keller, 2003; Keller & Cacioppe, 2001; Levy, 2005; Sigalit & Mikulincer, 2009). Attachment behavior transcends all cultures albeit culture may affect how individuals form attachments (Manning, 2003). Although individuals have a predominant attachment style, individuals can exhibit different attachment style behavior towards different people in their lives (Dewitte & DeHouwer, 2011; Weiss, 1994).

There is extensive transformational and transactional leadership research suggesting these are two valid and unique styles of leadership. Transformational leadership is characterized by individualized consideration, inspirational motivation, idealized influence, and intellectual stimulation (Antonakis et al., 2003; Bass, 1990; Li & Hung, 2009; Popper & Mayseless, 2003). Transactional leaders use contingent rewards to motivate their subordinates (Bass, 1990). In addition, transactional leaders use either passive or active management by exception, which involves enforcing consequences for inadequate performance (Basham, 2012; Bass, 1990; Giltinane, 2013).

Topical assumptions. Studies have shown a connection between attachment styles and leadership styles. For example, Popper et al. (2000) found that secure attachment was positively associated with transformational leadership. Conversely, they did not find a significant relationship between secure attachment and transactional leadership. However, Popper et al. (2000) did find that a negative correlation existed between insecure attachments and transformational leadership. Moreover, attachment styles and internal working models formed in early childhood become one of the driving forces in adult relationships (Timmerman & Emmelkamp, 2005) and are automatically activated in the workplace (Berson et al., 2006). Insecurely attached individuals are expected to project negative self-traits onto others, which would lead them to perceive others in a negative way (Mikulincer & Horesh, 1999).

Though individuals assigned management positions might not have gone through a rigorous selection process, recruitment experts recommend using a robust selection method, which often includes psychological assessments (McIntire & Greene-Shortridge, 2011). According to McIntire and Greene-Shortridge (2011), commonly used psychological assessments include those that measure behavior, aptitude, personality, and person/organization fit. As of this study, there is no indication that attachment style measurements have ever been used in leadership selection. Although some researchers have suggested including attachment theory in the leader selection and training process (Harms, Bai, & Hans, 2016), there seems to be no evidence in existing literature that attachment theory has ever been included as part of leadership training. Prior research has shown some connection between attachment style and individuals' perception of self and others (Berson et al., 2006; Mikulincer & Horesh, 1999; Timmerman & Emmelkamp, 2006) as well as a relationship of attachment style and leadership style (Popper et al., 2000). Based on these assumptions, it was determined that in the event

findings of this study revealed significant differences in how IT middle-managers perceived their employees' effectiveness based on IT middle-managers' attachment styles and leadership styles, those charged with personnel selection or with designing leadership training programs could consider adding to their repertoire attachment theory assessment and training.

Assumptions about measures. It was assumed the EAS (Germain, 2011a) that was designed to measure attachment styles in a workplace setting, would adequately measure individual attachment styles, which will be categorized as avoidant, anxious, or secure. Although attachment is not generally, considered a categorical variable, for the purposes of this study, it was defined as such. This instrument was selected because unlike other attachment style instruments that measure attachment by degrees where individuals would not be categorized as a specific attachment style but rather be represented as scoring higher on one measure versus another, the EAS allows categories based on highest mean. Individuals are given instructions to refrain from focusing on current relationships when answering this questionnaire but rather to answer the questions in general terms. In other words, individuals should consider how they would approach new relationships. Game (2008) explained individuals have predominant internal working models of attachment that they have developed from early childhood and fall back on when meeting people for the first time. Games went on to say as the relationship progresses, the attachment could change. Therefore, it is important individuals do not focus on specific relationships when answering the questionnaire. It was expected that given that the instrument has only 11 questions, individuals would be able to stay focused on the instructions of avoiding thinking in terms of current relationships.

It was assumed that the 21-item LSRS (Dussault, Frenette, & Fernet, 2013), which was designed to measure three leadership styles, transformational, transactional, or Laissez-faire and

which was vigorously tested for validity (Dussault, Frenette, & Fernet, 2013), would satisfactorily measure leadership styles and allow for the placement of individuals into categories. Individuals' whose highest mean score placed them into a Laissez-faire category, were excluded from the study. Although it is assumed individuals are not strictly transformational or transactional (Waldman, Bass, & Yammarino, 1990), for the purposes of this study, they would be categorized as one or the other based on their highest mean score.

Limitations

This study was limited to IT middle-managers because of their distinct role of bridging communication between the organization's business staff and the IT workers (Kakabadse & Korac-Kakabadse, 2000). Therefore, it would be inappropriate to draw conclusions about perception of middle-managers in general. Furthermore, the results of this study could not be generalized to all of IT management because once again a very specific population was selected for the study. Another limitation of the study was each subordinate was evaluated by only one IT middle-manager. There is the possibility that given an evaluation from a different manager, the employee would not have received the same or similar scores.

Individuals' national or ethnic culture was not considered in this study. There is some evidence culture may affect how people form attachments; however, the notion of inconsistency of the primary caregiver responsiveness affecting individuals' attachments holds true across all cultures (Manning, 2003). It is also unclear whether culture plays a role in managers' perception of employees' effectiveness. Moreover, it appears some cultures might welcome transformational leadership more than others. This is evident in results of Hsu and Chen's (2011) study, which reported employees in Taiwan when compared to Mainland China identified their leaders as transformational more often. The general expectation is that collectivist cultures are

more prone to following the vision of their leaders and organizations, which is characteristically like transformational leaders who seek a common goal, one that would benefit the entire organization (Jung & Avolio, 1999). Individualist societies are expected to be more focused on self-interests and personal goals; therefore, it is generally thought leaders should be transactional (Bass & Steidelmeier, 1999; Jung & Avolio, 1999).

Using self-reports to measure attachment style was also a study limitation. There is considerable controversy on the validity of self-reports, more so if they are used as the only means of measurement (Howard, 1990; Ravitz, Muander, Sthankiya, & Lancee, 2009). This is particularly true when it comes to attachment style self-reports. Ravitz et al. (2009) suggested individuals filling out attachment style self-reports are most likely focused on current relationships. Therefore, it is quite possible scores are not an accurate measure of individuals' predominant attachment style. In the present study, to try to combat this limitation, respondents were asked to abstain from focusing on current relationships but rather to think in general terms. A second limitation, Ravitz et al. (2009) noted was attachment style measures are considered passive because it is not likely the attachment system is activated at the time individuals are taking the test.

Expected Findings

First, the expectation was that categorizing participants into transformational or transactional leadership styles would show most transformational leaders would score high on secure attachment with very few falling into the category of insecure attachment (Popper et al., 2000). Additionally, given that past studies have shown avoidantly attached individuals tend to be compulsive about task completion (Hazan & Shaver, 1990) and transactional leaders are task oriented (Bass, & Steidlmeier, 1999), it was expected that avoidantly attached individuals would

be more likely to fall under the category of transactional leadership rather than transformational leadership. As of this study, no known studies appear to have shown any propensity for anxiously attached individuals to have either a transformational or transactional leadership style. Since a qualifying criterion for this study was individuals could be categorized as transformational or transactional leaders, it was expected that this study would yield a small number of individuals scoring high on anxious attachment.

Another expected finding was if leadership style was held constant, there would be significant differences in IT middle-managers' perception of employees based on attachment style. Existing literature supports differences in perception of self and others based on attachment styles. For example, Boatwright et al. (2010) argued securely attached persons have a positive self-model as well as a positive model of others whereas individuals who are avoidantly attached have a positive view of self and a negative view of others while individuals with anxious attachment have a negative view of self and others. Given this information, it was expected avoidantly attached individuals would consistently rate their employees' effectiveness lower than the ratings employees would receive if their managers were securely attached.

The third expected finding was if attachment styles were held constant there would be no significant differences in how IT middle-managers would rate the effectiveness of their employees. As of this study, there was no known evidence to support variations in leaders' perception of employees' effectiveness based on the leaders' leadership style. The same holds true for any level of management. Therefore, it was expected results of this study would support the null hypothesis, H₀₂: No significant differences exist in IT middle-managers' perception of employees' effectiveness based on leadership style when attachment style is held constant. In addition, the expectation was the null hypothesis, H₀₃: No significant interaction occurs between

attachment style and leadership style in effecting IT middle-managers' perception of employees' effectiveness, would also be supported. This was due in part to the expectation that securely attached individuals have characteristics similar to those of transformational leaders (Manning, 2003; Popper et al., 2000). In addition, there is some evidence that supports avoidantly attached individuals are strongly task oriented (Davidovitz, Mikulincer, Shaver, Izsak, & Popper, 2007), which is characteristically like transactional leaders. Thus, the expectation was combining the two variables would not provide additional predictive value.

Organization of the Remainder of the Study

Chapter 2 is a review of the literature on attachment styles and leadership styles. In addition, it presents a synthesis of past research findings as well a discussion of the theoretical foundation of the present study. Chapter 3 goes into more detail about the purpose of the study. It covers extensively the research design including a walkthrough of participant selection, data gathering and data analysis. Furthermore, it discusses ethical considerations of the study. Chapter 4 details results of the study. Chapter 5 summarizes the results of the study, explains its limitations, and offers recommendations for future studies. The final pages of this document include references, tables, and additional documentation.

CHAPTER 2. LITERATURE REVIEW

The three variables that drove this study were adult attachment style, leadership style, and IT middle-managers' perception of employee effectiveness. Researchers have been studying attachment style as it relates to the workplace for quite some time. It is difficult to ignore that forming relationships is part of every aspect of human existence, including the workplace. Per Bowlby (1982), attachment style is a pattern of proximity seeking behavior developed from infancy and carried throughout the lifespan. Initially, attachment behavior is driven by a need for affiliation and an instinct for survival. Although the attachment behavioral system, which includes internal working models of self and others, is a permanent element of human composition, through years of experience it becomes more complex and flexible (Sable, 2008).

When it comes to leadership, there is no argument against the fact that leadership is a very important element in the success or failure of an organization, and leadership training is essential. Most research on leadership style and adult attachment style has been on subordinates' attachment style and leaders' leadership style. Moreover, attachment style research has primarily focused on the effects of attachment style on employees' wellbeing (Lanciano & Zammuner, 2014), employees' overall job satisfaction (Lanciano & Zammuner, 2014), and employees' view of their leaders (Jayasingam, 2009). Leadership style research has primarily focused on leadership effectiveness (Avolio, 2007; Effelsberg, Solga, & Gurt, 2014; Tourish, 2014).

The following is a synopsis of the research conducted on the three variables associated with this study; that is, attachment style, leadership style, and perception. The literature review

will commence with attachment style research, focusing on adult attachment in relation to the workplace. Secondly, the literature review will cover leadership styles, mainly transformational and transactional leadership. This will be followed by what research has uncovered thus far about the possible association between attachment style and leadership style. The final portion of the literature review will cover leader and subordinate perceptions.

Methods of Searching

The literature review was conducted using Capella University's Summon research database and Google Scholar. Using Capella University's Summon and Google Scholar often directed the researcher to the Directory of Open Access Journals available to Capella University learners. Terms such as *adult attachment*, *transformational leadership*, *leadership style*, *perception*, and *job performance* were used as well as phrases such as *leadership style and employee effectiveness* or *attachment style and leader effectiveness*. Other more general terms used were *quasi-experimental designs*, *quantitative research*, and *qualitative research*. Most articles cited other authors who had investigated relevant topics, which led the researcher to seek the primary source. In addition, the researcher focused on discussions within the literature suggesting new areas of study, which was of primary importance in uncovering more current existing studies.

Theoretical Orientation for the Study

The primary theoretical foundation behind this research study is adult attachment theory. Attachment theory posits infants are born with a need for affiliation and a survival instinct that encourages them to seek relationships with primary caregivers, and based on responsiveness of caregivers, infants develop secure or insecure attachment styles (Ainsworth & Bowlby, 1991). Bowlby argued attachment is activated at birth and becomes part of individuals' permanent

internal models (Bowlby, 1982; Ainsworth & Bowlby, 1991; Levy, 2005). There is extensive research that supports the notion that attachment styles formed in early childhood are carried into adult relationships, including workplace relationships (Albert & Horowitz, 2009; Bolen, 2000; Richard & Schat, 2011). Adult attachment is very much like infant attachment when it comes to bonding with the attachment figure despite any turbulence in the relationship (Weiss, 1994). However, while infant/primary caregiver relationships are expected to be asymmetric, it is expected adult relationships would have more of a balance in power (Weiss, 1994).

Individuals who form secure attachments have positive views of self and others whereas individuals with insecure attachments have negative views of either themselves or others or both (Keller & Cacioppe, 2001; Levy, 2005; Sigalit & Mikulincer, 2009). Consequently, attachment styles affect how leaders and subordinates relate to each other (Keller & Cacioppe, 2001). For instance, Keller and Cacioppe asserted insecure adults enter the workforce with unsure or negative expectations. Conversely, Keller (2003) suggested leaders may subconsciously reference their internal attachment models when evaluating their subordinates' performance.

In addition to attachment theory, the proposed research will consider transformational leadership theory, which is widely used to explain leadership effectiveness (Li & Hung, 2009). There are four types of leader behaviors associated with transformational leadership style. First, individualized consideration involves listening, mentoring, and tending to employees' needs (Bass, 1990). Second, Bass (1990) described charisma as the ability to provide a vision and a sense of a mission while instilling pride and gaining trust and respect from followers. Li and Hung (2009) explained charismatic behavior as idealized influence that generates a connection between leaders and employees. The third behavior Bass (1990) explained was inspiration or inspirational motivation, which is leaders' ability to bring employees on board with the mission

of the organization by communicating high expectations and important purposes in simple ways. Fourth, intellectual stimulation, which according to Bass (1990) involves promoting problem solving and occurs if leaders are willing to take risks, challenge employees, and move on employees' ideas (Li & Hung, 2009). Bono, Foldes, Vinson, and Muros (2007) examined the relationship between transformational leadership and employees' emotional wellbeing and found a positive relationship between transformational leadership behaviors and positive employee emotions and job satisfaction. The role of leaders in organizations regardless of their predominant leadership style is to draw out effective performance from their employees (Giltinane, 2013).

What is known about attachment styles and leadership styles is certain attachment styles have characteristics like those found in certain leadership styles (Popper et al., 2000). Manning (2003) made a compelling argument when he asserted securely attached individuals are more likely to be transformational leaders; are more open to negative feedback; tend to use problem focused coping; have good conflict resolution skills; use collaborate communication techniques with their staff; are more confident in their employees; and are more willing to delegate. Additionally, securely attached individuals perceive themselves as more effective team leaders than do insecurely attached individuals (Berson e al., 2006).

Bresnahan and Mitroff (2007) alleged including attachment theory, which posits individuals develop attachment styles in infancy based on their relationship with primary caregivers, as part of the study of leadership will add significantly to theories of leadership. Bresnahan and Mitroff pointed out attachment theory can take leadership theories in a variety of directions by adding the interrelation factor into the discussion. Bresnahan and Mitroff claimed attachment theory addresses leader/follower dynamics. Keller and Cacioppe (2001) maintained

that in any type of relationship including work relationships, individuals are conflicted about the level of attachment they should have. Keller and Cacioppe asserted because attachment styles affect how leaders and subordinates relate, leadership theories are insufficient in predicting leaders' success, which encourages further research on the topic of leadership and attachment theory. It is not yet known if integrating the concept of attachment theory into leadership training will improve leaders' self-awareness, which in turn could help leaders better evaluate their employees.

Review of the Literature

Attachment Theory

In developing attachment theory, Bowlby was influenced by the works of many clinicians who were focused on the effects of prolonged periods of institutionalization of children and frequent changes of the children's mother-figure (Bowlby, 1982). A second and just as important influence was Maslow's work on the effects of maternal deprivation (Bowlby, 1982). Bowlby (1982) also credited Ainsworth as a key person in presenting a compilation of the all the maternal-deprivation literature available and pointing out the limitations in the literature, which encouraged Bowlby to continue his research of attachment behavior. Bowlby's approach was to observe children's behavior in a variety of defined situations and take copious notes that he would later use to build theory. Bowlby (1982) decided early on the caregiver did not have to be the biological mother as some researchers had suggested in the past. Bowlby concluded the attachment figure could be anyone the child identified with as the primary caregiver and the person who the child would turn to in times of distress.

When primary caregivers are attentive, it establishes a secure base for infants to grow and explore; however, if primary caregivers are unresponsive or inconsistent, infants develop

insecure attachments (Bowlby, 1982). From birth to about the age of 7, attachment to the primary caregiver is the most important element of a child's feeling of security (Engelbert & Wallgren, 2016). Ainsworth (1985) believed that around the age of six months, infants can understand the existence of the primary caregiver even in the caregiver's absence and therefore, at this age and based on caregivers' responsiveness, infants start forming internal representations of self and others known as *working models* (Bowlby, 1982). Secure infants will develop a positive working model of self and others whereas insecure infants will develop negative working models of self or others or both (Ainsworth, 1985; Bowlby, 1982). Once internal working models are established, they become automatic responses and are resistant to change (Bowlby, 1988).

Even though attachment behavior is most noticeable in early childhood, it is present throughout an individual's life and most evident during emergency situations or what the individual perceives as an emergency (Ainsworth & Bowlby, 1991; Bowlby, 1982). Furthermore, attachment seeking behavior is not limited to one attachment figure but rather individuals could exhibit attachment seeking behavior towards a variety of people in their lives depending on the circumstances (Bowlby, 1982). Attachment seeking and caregiving behavior that form the basis of attachment theory are both considered to be mentally healthy and a part of the effective functioning of personality (Bowlby, 1988). Nevertheless, there is clinical evidence suggesting when primary caregivers are consistently unresponsive or even punitive when infants seek proximity, this leads to infants developing an avoidant attachment style, which in turn could lead to a variety of personality disorders or delinquency later in life (Bowlby, 1988). Although research supports Bowlby's view that insecure attachments could lead to various psychological problems and relationship problems, Ein-Dor, Mikulincer, Doron, and Shaver (2010) argued having a predominant insecure attachment has its advantages. Considering research indicates that

at least half of the world population is insecurely attached (Ein-Dor et al., 2010), research on the advantages of insecure attachment would be beneficial because it could reduce the stigma attached to the term *insecure* attachment style.

Adult attachment. The core concept of attachment theory is that early attachment experiences serve as the model for future relationships (Weizmann, 2001). However, individuals are not exclusively insecurely or securely attached. Even so, they have a predominant attachment style they carry from childhood (Richards & Schat, 2011). Otherwise stated, individuals who have a predominantly insecure attachment style can form secure attachments with other persons and vice versa (Milyavskaya & Lydon, 2012). Keren and Mayseless (2013) asserted that even those who may have started out in life with insecurity in their attachment situations, as adults have freedom to choose with whom they want to form relationships and they strive to form relationships with others who are securely attached. As a result, individuals tend to have more secure relationships in adulthood (Keren & Mayseless, 2013). What makes adult attachment unique from childhood attachment is that for the most part, adults no longer view their parents as all-knowing and powerful, which might lead adults to direct their attachment needs towards someone other than a parent (Mayseless, 2010).

Studies have hinted towards a relationship between age and attachment style where older adults were more likely to score higher in attachment avoidance or secure attachment and lower in anxious attachment (Mikelson, Kessler, & Shaver, 1997). Mikelson et al. (1997) suggested these results could be representative of older adults having formed positive romantic relationships or of adults becoming more self-protective as they age. In the same study Mikelson et al. found evidence supporting a connection between attachment style and socio-economic class as well as a connection between childhood adversity and attachment style. Mikelson et al.

pondered whether attachment styles affect SES and relationship status or if the opposite is true. Bakermans-Kranenburg, van IJzendoorn, and Kroonenberg (2004) suggested the former rather than the latter is true, a lower socio-economic status affects attachment style because mothers who are struggling financially will be at a higher risk of emotional distress, which in turn affects their responsiveness to their infants.

Most often attachment styles are categorized as secure, anxious/ambivalent, or avoidant (Keller & Cacioppe, 2001). Boatwright et al., (2010) considered the anxious/ambivalent to be two distinct styles, one being a preoccupied style and the other a fearful style. Attachment styles are part of two underlying dimensions of adult attachment. That is, the internal model of self and the internal model of others (Boatwright et al., 2010; Mikulincer & Horesh, 1999; Schusterschitz et al., 2011). Griffin and Bartholomew (1994) asserted internal working models are conceptualized by four combination of attachment patterns. The first combination is the securely attached, represented by low anxiety and low avoidance, coupled with a positive view of self and a positive view of others (Desivilya, Sabag, & Ashton, 2006; Griffin & Bartholomew, 1994). In contrast, fearfully attached individuals are categorized by high anxiety and high avoidance with a negative self-model and negative others-model (Desivilya et al., 2006; Griffin & Bartholomew, 1994). The third combination are the dismissively attached who have low anxiety and high avoidance; with a negative view of others and a positive self-model; and who tend to be self-confident and negate any emotions (Desivilya et al., 2006; Griffin & Bartholomew, 1994). Finally, there are those with a preoccupied pattern, depicted as having high anxiety and low avoidance as well as a negative view of self and a positive view of others, and who are fearful of being rejected and are constantly seeking reassurance (Desivilya et al., 2006; Griffin & Bartholomew, 1994).

The self-model represents the degree to which individuals feel they are worthy of a positive reaction from others whereas the others-model represents the degree to which individuals feel others will be available and supportive (Griffin & Bartholomew, 1994). Based on attachment styles and internal working models of self and others, individuals will have a positive or negative view of self as well as a positive or negative view of others. Secure attachment presupposes securely attached children become securely attached adults who develop relationships of trust and who feel worthy of love and recognition (Keller & Cacioppe, 2001). It is expected that securely attached persons have a positive internal self-model as well as a positive internal model of others (Boatwright et al., 2010; Mikulincer & Horesh, 1999; Schusterschitz et al., 2011). Anxious adults, on the other hand, who experienced inconsistent responses from their primary caregivers and who have a negative view of self and a positive view of others (Boatwright et al., 2010; Mikulincer & Horesh, 1999; Schusterschitz et al., 2011) are preoccupied with relationships, have low self-esteem and worry about rejection (Sigalit & Mikulincer, 2009). Consequently, the anxiously attached are constantly striving for acceptance but never feel accepted.

To their detriment, individuals with anxious attachment tend to react in maladaptive ways to perceived threats, which increases the likelihood of negative reactions from those around them (Sigalit & Mikulincer, 2009). Conversely, individuals who are avoidantly or dismissively attached and who have a positive view of self and a negative view of others Boatwright et al., 2010) are prone to showing very little interest in others or in some cases, even hostility (Keller & Cacioppe, 2001). Where anxious-ambivalent adults feel others do not want to get as close to them as they would like, avoidant adults feel uncomfortable when others try to get too close (Germain, 2011b). The feeling of discomfort in closeness stems from the avoidantly attached

individuals' pessimistic view of the world; their sense of being treated unfairly; their perception of others as untrustworthy; and their difficulty in depending on others (Sigalit & Mikulincer, 2009). Although most research supports anxiously attached individuals have a negative view of self and a positive view of others, Dewitte and DeHouwer (2010) found anxiously attached individuals have a negative view of others in the sense that others might not be available or dependable. In either case, anxiously attached as well as the avoidantly attached adults do not see themselves and others as being at the same level of worthiness. They are either thinking, "you are better than I am" or "I am better than you are", but rarely thinking, "we are equals".

Not only do attachment styles interact with internal models of self and internal models of others, Mikulincer and Horesh (1999) found attachment styles influence how individuals project negative self-traits onto others. Mikulincer and Horesh's findings showed avoidant persons are prone to bias towards others because they project onto others negative self-traits, which they reject from their self-representation. In contrast, Mikulincer and Horesh's findings reflected anxiously attached individuals project negative self-traits that define their actual self onto others. The bottom line is insecurely attached individuals, whether avoidantly attached or anxiously attached, tend to project negative self-traits (actual self or unwanted self) onto others. Furthermore, Dewitte and DeHouwer (2011) found individuals with preoccupied and fearful attachments assessed their attachment figures in a more negative light than did the securely attached individuals.

Dewitte and DeHouwer (2011) voiced their concern that attachment styles are often treated as stable across relationships. They suggested it is more accurate to interpret attachment styles as relationship-specific, varying across relationships. Moreover, Game (2008) made a distinction between relationship specific internal working models and global working models of attachment.

Game explained internal global working models are the ones individuals developed throughout the years and fall back on when meeting new people of who they have limited to no information. Relationship specific models as the phrase implies are associated with an internal model formed with a specific person based on a history of interactions with that person. Thus, someone approaching a relationship with high anxiety based on his or her global working model, may eventually develop a secure attachment with the other person based on continued interactions with said person.

Existing literature supports the view that attachment styles formed in early childhood are carried into adult relationships (Blatt & Levy, 2003; Weizmann, 2001). However, Weiss (1994) maintained adult attachment differs from infant attachment, specifically in the balance of power. Weiss explained while the infant/primary caregiver relationships are asymmetric, it is assumed adult relationships would have a balance of power except for relationships where one person is in a position of authority over others such as leader/subordinates.

Individuals could have multiple attachment figures with varying degrees of strength in the attachments (Milyavskaya & Lydon, 2012); in other words, individuals have a hierarchy of attachment figures. Keren and Mayseless (2013) asserted adults have freedom to choose their attachment figures and through their research, Keren and Mayseless confirmed adults over fifty years of age will have more chosen attachment figures in their attachment figure hierarchy than younger adults. Moreover, individuals tend to seek those attachment figures, with whom they have the strongest attachment or those whom they placed higher in the hierarchy, as a haven in times of distress irrespective of preference for another (Milyavskaya & Lydon, 2012). For instance, a person can have a strong insecure attachment to their parent but have a secure

attachment with a friend, and in times of distress gravitate towards the parent because of the strength of the attachment, albeit insecure.

Keren and Mayseless (2013) proclaimed adults who have romantic partners would often place them at the top of the hierarchy; otherwise, a family member would be chosen as the top figure in the hierarchy. Keren and Mayseless went on to state while individuals include friends in their attachment hierarchy it is unusual that a friend would be at a higher hierarchical level than a parent, romantic partner, or some other family member. Results of their study supported three important assumptions. First, with age, individuals have more freedom to choose attachment figures. Secondly, despite having more freedom to choose, adults would more often choose parents, romantic partners, or other family members, with romantic partners generally taking the top position even above parents. Thirdly, chosen attachments tend to be more secure in nature. However, Keren and Mayseless conceded the attachment to the mother figure regardless of the positioning in the hierarchy would not waver in style. In other words, if the individual developed an insecure attachment to the mother figure as an infant, it would remain as such in adulthood.

Some have suggested predominant attachment styles formed in early childhood are stable throughout the lifespan and cannot be modified through training or by other means such as therapy (Richards & Hackett, 2012). Macaux (2014) took an opposite stance arguing attachment styles developed since infancy and carried into adulthood can be modified and should be modified if as a child, the person developed an insecure attachment to a primary caregiver. For example, Macaux explained that although an insecure attachment for an infant-caregiver might have served well, it will not be as effective in adult relationships and particularly in the workplace, more so for leaders, who should learn to recognize when they need assistance from others, and learn how to accept help. Nonetheless, Mayseless and Popper (2007) suggested as

adults, attachment behaviors should be demonstrated less often since adults are more self-reliant. However, Hansbrough (2012) argued the attachment system is chronically activated for those who are anxiously attached regardless of their age, which is in contrast with avoidantly attached individuals who are not expecting support from others and therefore, do not have the attachment system activated very often.

Attachment styles have been found to play a role in individuals' reactions to social and nonsocial stimuli whether it be positive or negative (Vrtička, Sander, & Vuilleumier, 2012). Social stimuli as defined by Vrtička et al. (2012) is anything involving humans such as one-to-one contact with an individual, observing individuals interact with each other, or participating directly or indirectly in activities with other individuals. Nonsocial stimuli could involve animals or scenes such as a beach (positive) or a wildfire (negative) (Vrtička et al.). In their study, Vrtička et al. found there were significant differences in individual reactions to stimuli based on avoidant or anxious attachment. For instance, the higher individuals scored in avoidant attachment the less pleasant they found social scenes; conversely, the higher individuals scored in anxious attachment the more arousing (positive or negative arousal) they perceived social scenes to be. In addition, Vrtička et al. stated the highly anxiously attached felt less sense of controllability of emotional scenes perhaps even appearing to over-react to stimuli.

In summary, individuals will form secure and insecure attachments to a multitude of figures in their life. In other words, the same individual could have a strong insecure relationship with one person and a strong secure relationship with another, which is why Wachtel (2012) stressed the importance of refraining from categorizing people as securely or insecurely attached. Wachtel explained no one person is securely or insecurely attached all the time to any or all relationships. However, there is a hierarchical order when seeking comfort, and the individual

might have a stronger relationship with the insecure attachment figure; therefore, he or she would first seek comfort with this person. Although adults do not require the consistent presence of an attachment figure as an infant might, adults still need the reassurance that in times of distress there is someone they can count on. As adults, the need to seek proximity and safety in others in times of distress is not mal-adaptive but quite the opposite (Sable, 2008).

Attachment and the workplace. Researchers have been studying attachment theory as it relates to the workplace for quite some time. It is difficult to ignore the fact that forming relationships is part of every aspect of human existence. The ability to adequately assess attachment styles in workplace settings has been one of the major concerns for researchers (Harms, 2011). Even so, attachment theory is starting to gain popularity in organizational psychology. However, most of the existing literature that focuses on leader/follower dynamics does so from the perspective of followers' perception of their leaders (Harms, 2011). A possible reason for focusing on follower perceptions is that in leader/follower relationships, the leader could be viewed as the attachment figure taking on the caregiver role; it is unlikely the opposite would be true. Bresnahan and Mitroff (2007) suggested individuals unconsciously transfer onto their leaders, feelings they formed in early childhood towards their primary caregivers.

Hazan and Shaver (1990) argued work orientation is functionally like what Bowlby referred to as exploration. For infants, exploration is a necessity to grow and become competent. However, it has its hazards and infants are dependent on their caregivers as a refuge in times of distress. Hazan and Shaver (1990) compared childhood exploration to the way adults approach work. Hazan and Shaver (1990) hypothesized that securely attached individuals would demonstrate a secure work orientation. Avoidantly attached adults, on the other hand, would prefer to work alone, be compulsive about completing tasks, and be unwilling to take vacations

whereas the ambivalently attached would prefer working with others and overextend themselves in an effort to please. The results supported all three hypotheses. Hazan and Shaver (1990) explained avoidantly attached individuals can be satisfied with their work but less satisfied with coworkers whereas the anxiously attached did not enjoy the actual work as much as they enjoyed working with others. Furthermore, Hazan and Shaver (1990) reported securely attached individuals are not overly concerned with coworkers' rating their performance because they approach their work with self-confidence.

Meredith, Poulsen, Khan, Henderson, and Castrisos (2011) confirmed Hazan and Shaver's (1990) findings. In their study, Meredith, et al. (2011) investigated attachment styles in relation to work-related self-perceptions. Results of the study indicated secure attachment to be associated with individuals investing more skill and energy at work and feeling less overcommitted as well as having a stronger sense of being rewarded for their efforts. In addition, Meredith et al. found securely attached individuals do not feel work interferes with their social life. Conversely, Meredith et al. found the avoidantly attached often feel overwhelmed with work and are unable to leave work at work; even so, the avoidantly attached perceive high levels of recognition for their efforts. The anxiously attached, on the other hand, feel underappreciated and over-committed. However, Meredith et al. found anxiously attached individuals invest less time and energy on actual work tasks than do their avoidantly and securely attached counterparts even though the anxiously attached might not recognize their performance is lacking.

Hazan and Shaver (1990) suggested individuals who are anxiously attached will overextend themselves, making commitments they cannot keep because they are continuously trying to please others. Furthermore, despite committing to completing multiple assignments beyond their capacity, they consistently fail to invest more time and energy in the actual

assignment (Meredith et al., 2011). Over-commitment at work as well as feeling overwhelmed with work could lead insecurely attached individuals to experience job burnout. In a study by Littman-Ovadia, Oren, and Lavy (2013), they found anxious attachment as well as avoidant attachment, which they categorized as being obsessively self-reliant, to be positively associated with work burnout. Additional results of the same study showed a positive association between avoidant attachment and work engagement, career commitment, and emotional distress. Conversely, the results showed anxious attachment to be positively related to emotional distress but was not associated with work engagement or career commitment.

Sigalit and Mikulincer (2009) were interested in the association between attachment style and job burnout. Results of their study were in line with results from the later study conducted by Littman-Ovadia et al. in 2013, which found a positive connection between insecure attachment and job burnout. In addition, Sigalit and Mikulincer (2009) found insecure attachment was related to negative perception of team cohesion and organizational fairness, which also contributed to higher job burnout. Sigalit and Mikulincer (2009) suggested insecure individuals are predisposed to negative views of others, which would reflect in their views of team cohesion. Moreover, Sigalit and Mikulincer (2009) stressed the importance of research on job burnout because it is one of the most serious problems afflicting organizations. They indicated that previous studies were exclusively focused on variables related to working conditions. However, more researchers are showing interest in the effects of personality on job burnout.

Results of a study conducted in a workplace environment by Lanciano and Zammuner (2014) showed securely attached individuals as well as those scoring high on anxious attachment were more emotionally unaware. However, Lanciano and Zammuner explained the anxiously attached although not very emotionally aware of others' feelings, are very much aware of their

own feelings. Moreover, after conducting a study on attachment styles and prosocial tendencies in organizations, Desivilya et al. (2006) concluded there was enough evidence to support their theory that the higher scores in anxiety and avoidance attachment were associated with a higher frequency of individuals feeling disrespected and treated unfairly by their supervisors.

In a separate study, Albert and Horowitz (2009) found a connection between attachment styles and ethical behavior in the workplace. Albert and Horowitz theorized that because individuals with secure attachment have a positive view of others, they would be more prone to exhibit stronger ethical beliefs. In addition, their theory was that because dismissive individuals have more of a negative view of others, they would be more prone to unethical behavior. Results of Albert and Horowitz's studies supported both theories showing securely attached men and women had significantly stronger ethical beliefs. Conversely dismissively attached men and women reported a higher overall indifference to ethical transgressions.

In another study, Geller and Bamberger (2009) examined the effects of insecure attachment on instrumental helping and organizational citizenship behavior. They uncovered a negative correlation between insecure attachment styles and individuals' corporate citizenship. Geller and Bamberger defined instrumental help as task driven rather than helping behavior that is linked to a person's emotional wellbeing. Results of their study showed attachment anxiety is inversely associated with a desire to offer instrumental help in the workplace. Conversely, Geller and Bamberger noted in romantic relationships, anxious individuals are more driven to help than others. According to Geller and Bamberger (2009), previous studies had shown a positive relationship between anxiety attachment and helping behaviors. However, they contended anxiety attachment is associated with compulsive helping with the person serving the role of caregiver offering help but for egocentric reasons; that is, to satisfy personal needs of self-esteem

and emotional wellbeing, making the support ineffective. Geller and Bamberger went on to say avoidant adults are less likely to exhibit helping behaviors and when they do so, the recipients perceive the helper as cold and unfriendly. Therefore, the recipients are less likely to seek help from this person again. Geller and Bamberger's findings are important to organizational psychology in that the results suggest attachment styles influence behaviors at work.

Little et al. (2011) noted insecure attachments in the workplace are characterized by counterdependence and overdependence. Little et al. went on to explain counterdependence is typified by minimizing emotional involvement, suppressing negative thoughts, relying on repressive methods, avoiding close relationships, and avoiding dependence on others. On the other hand, individuals who are overdependent, overemphasize feelings and emotions, may appear clingy to others because they are constantly seeking support and provide little support to others. Results of the study conducted by Little et al. demonstrated securely attached individuals showed more vigor at work, which includes better attendance, a willingness to go beyond the call of duty, and a more positive attitude. Moreover, securely attached individuals were less likely to commit deviant behaviors such as tardiness. In contrast, overdependency and counterdependency were reflected as reduced vigor at work. Little et al. implied those serving in supervisory roles would benefit from understanding attachment styles because having insight about attachment styles, could help supervisors help employees with insecure attachments increase vigor at work. Little et al. went on to suggest attachment style insight could help supervisors play an active role in trying to revise their employees' internal working models. The suggestion of supervisors being able to help revise employees' internal working models may be overreaching.

Tziner and Tanami (2013) explored the links between attachment style and perfectionism as well as the link between attachment style and workaholism. Ozbilir, Day, and Catano (2015)

defined perfectionism as a tendency to set high standards for self and sometimes for others as well. Ozbilir et al. went on to explain perfectionism as being positive (adaptive) or negative (maladaptive). The difference in the two is in how perfectionists perceive theirs or others' success in meeting those high standards. Maladaptive perfectionism is characterized by a constant internal struggle led by fear of making or revealing a mistake because the individual is unable or unwilling to recognize past successes as predictors of future performance. Tziner and Tanami (2013) found both secure and insecure attachments were associated with maladaptive perfectionism. However, it was the combination of insecure attachment and maladaptive perfectionism that was positively associated with workaholism. Tziner and Tanami stressed the importance of attachment theory in the workplace, explaining leaders should pay close attention to subordinates' attachment styles and subordinates' inclination towards maladaptive perfectionism, which could lead to a hostile work environment.

There also have been studies of attachment styles and overall well-being and job satisfaction. Results of such studies have shown lower levels of anxiety and avoidance predict higher levels of well-being and job satisfaction (Lanciano & Zammuner, 2014). Considering all the possible connections between attachment style and the workplace, Dahling and Librizzi (2015) theorized that studying attachment styles could add value to the study of retention and job turnover. However, results of a study they conducted did not demonstrate a direct link between attachment style and work adjustment. Nevertheless, the relationship between fit perception and job satisfaction were weakened for highly avoidantly attached individuals. Dahling and Librizzi suggested hiring managers should consider attachment because there is some evidence to support avoidantly attached employees tend to show less positivity regarding their job fit.

Besides individual attachment theory, there is another phenomenon being researched; that is, group attachment. Markin and Marmarosh (2010) stated group attachment is like individual attachment in that it starts in early childhood albeit based on family, cultural, or other social groups. According to Markin and Marmarosh, individuals scoring high on group attachment avoidance tend to be dismissive of groups and avoid closeness to the group. Individuals scoring high on group attachment anxiety, on the other hand, are hypersensitive and preoccupied with acceptance or rejection within the group. Although Markin and Marmarosh were strictly referring to therapy groups, future studies could explore work groups. In the IT world of larger organizations, it is typical to work as a team on projects. Many times, these teams are composed of multidepartmental participants.

Attachment and organizational commitment. Even though it is a natural human process to form attachments, not everyone gives the same degree of importance to the different attachment figures in their lives. While some may feel a strong bond or a strong need for bonding with specific groups, others may be neutral regarding those same groups (Schusterschitz et al., 2011). In other words, they are neither securely nor insecurely attached. The degree of attachment depends on the relevancy the group has to the individual. It is more likely than not individuals will establish bonds with the organizations that employ them. Schusterschitz et al. (2011) suggested attachment and commitment go hand in hand. They hypothesized that securely attached adults are less committed to their organizations than insecurely attached adults.

Schusterschitz et al. (2011) explained securely attached adults can experience great pleasure from working for an organization. However, they do not seek to satisfy emotional needs through an attachment to the organization. In contrast, although insecurely attached adults may have a difficult time forming bonds with others, they may form attachments with their

organization and stay with the organization because they are emotionally attached to it. Schusterschitz et al. deduced securely attached individuals are less committed to their organization but have high levels of job satisfaction. Although these statements seem to be at odds with previous research, if one considers job satisfaction and job commitment to be two separate and distinct variables, it is entirely possible persons who experience lower job satisfaction may also be the most committed to their employers.

Schusterschitz et al. (2011) hypothesized anxiety attachment as well avoidant attachment positively relate to the three organizational commitment components Schusterschitz et al. listed the three components as: affective component, which is an emotional attachment to an organization that leads individuals to stay with the organization by choice; normative component, which is a sense of loyalty to an organization that compels individuals to stay with the organization for conscientious reasons; and the continuance component, which leads individuals to stay with a company because they feel it would be too costly to leave it or there are no other alternatives. Results of the study suggested a positive relationship between anxiety attachment and the three organizational commitment elements. Additionally, affective commitment was positively related to avoidant attachment. Conversely, the results showed there was no significant relation between normative commitment and avoidance attachment; the same holds true for continuance commitment and avoidant attachment.

Social support and attachment. Coworkers depend on each other in many ways, particularly new employees. New employees seek social support from coworkers to adjust to their new environment and get a better understanding of what they are expected to do. Some organizations have formal new employee programs where they assign new employees a mentor. However, when organizations do not have these types of programs, new employees are more

dependent on the social support coworkers provide. There are four forms of support all aimed at reducing stress. 1) Emotional support – care giving or affective support; 2) appraisal support – affirmation or evaluation feedback; 3) informational support – providing direction; and 4) instrumental support – assistance in completing tasks or handling work related problems (Nelson & Quick, 1991, p. 544). New employees are seeking attachments to relieve the stress of starting a new job. The attachment styles of those who are there to provide the potential support new employees need affect the level of support new employees will receive.

The degree in which social support is available and helpful will have a positive effect on new employees' job satisfaction and performance ratings, or a negative effect creating psychological distress or intention to leave (Nelson & Quick, 1991). Nelson and Quick (1991) conducted a study with participants from three organizations, a large university, an oil field service, and an electronics manufacturer. Ninety-one people, who had been hired within the previous three months, participated in the study of which 51 were male and 40 females. Nelson and Quick hypothesized that helpful social support positively related to job satisfaction and performance; and negatively related to psychological distress and intention to leave. Social support came via two means, new employees sought out help or attachment to peers, supervisors, and other new employees recognizing they needed help (care-seeking) or others sought to help new employees (care-giving). According to Nelson and Quick, new employees who formed healthy attachments to others were more secure and self-reliant than those who did not.

Attachment and leader/subordinate relationships. Based on extensive attachment theory research, it is not expected that leaders will view their subordinates as an attachment figure, but rather subordinates would view their leaders as attachment figures. Keller and Cacioppe (2001) suggested people carry infant-caregiver attachment patterns into their adult life

and apply these patterns to their managers at work. However, it should be noted attachment styles influence caregiving behaviors as well as care-seeking behaviors (Bowlby, 1988). To some extent, leaders take the role of primary caregivers; thus, subordinates are expecting leaders to be responsive to their needs (Bresnahan & Mitroff, 2007; Keller & Cacioppe, 2001). Per Keller and Cacioppe (2001), irrespective of individuals' attachment style, individuals expect their leaders to guide them, support them, have their best interest at heart and not behave in ways that are detrimental to their general wellbeing.

Research has shown a link between attachment styles and the quality of leader/subordinate relationships, with results indicating a negative correlation between insecure attachment and positive leader/subordinate relationships (Richards & Hackett, 2012). In addition, studies have shown securely attached adults enter the workforce with positive expectations of their leaders, which moves them to treat their leaders with high regard and with a willingness to follow the leaders' instructions and/or demands (Keller & Cacioppe, 2001). More than likely, leaders will respond positively when employees exhibit a willingness to follow their lead. Insecurely attached adults, on the other hand, are likely to enter the workforce with unsure or negative expectations of their boss. For example, Keller and Cacioppe (2001) reported avoidant adults in anticipation of not receiving support from their leaders will be distant and inattentive, which conveys a message to the leader of a hostile, disrespectful employee. Conversely, anxious-ambivalent adults crave to be accepted yet fear rejection; this leads them to become overly dependent on their leaders. Leaders in turn, may feel overwhelmed by the subordinates' neediness and distance themselves from them. In a self-fulfilling prediction, the employees are likely to get what they expected, and it reinforces their secure or insecure attachment (Keller & Cacioppe, 2001).

Richards and Hackett (2012) indicated when leaders and subordinates both have a predominant anxious attachment, this in and of itself, reduces the negative effect anxious attachment has on leader/member exchange (LMX) development. Nonetheless, Keller and Cacioppe (2001) compared anxious-ambivalent leaders to anxious-ambivalent mothers who appear to be attentive to their offspring but are incapable of recognizing their child's abilities and accomplishments. The anxious-ambivalent mother does not validate her child, crippling the child's willingness to explore the world and become more autonomous. When leaders exhibit a lack of confidence in their employees' abilities and skills, the employees start losing confidence in their own competence becoming more dependent on their boss. According to attachment style literature, there is a positive relationship between supervisors' anxious attachment and employees' lower satisfaction at work as well as lower positive affect (Ahmad, 2008; Kafetsios, Athanasiadou, & Dimou, 2014). Conversely supervisors' high avoidant attachment has been positively associated with employees' lower negative affect and higher job satisfaction (Kafetsios et al., 2014).

It is not just subordinates' predominant attachment style that influences leader/subordinate relationships. Sigalit and Mikulincer (2009) suggested insecure leaders are likely to distrust others and react in maladaptive ways to perceived and probably unfounded threats. Additionally, insecurely attached leaders could potentially sabotage a subordinate's future by making invalid claims regarding the subordinate's behavior or job performance. Furthermore, insecurely attached leaders are very difficult to please because of their lack of self-worth and their inability to feel accepted (Sigalit & Mikulincer, 2009). Richards and Hackett (2012) noted that in leader/subordinate relationships, all it takes if for one or the other to have an

avoidant attachment style to negatively affect LMX development. Richards and Hackett suggested attachment theory provides input into why some leader/follower dyads fail.

Keller (2003) claimed the most effective and consistently positive leader-follower relationships are those when both the leader and the follower have the same attachment style regardless of the type of attachment. Ahmad (2008) took it a step further indicating there is a better chance of subordinates reporting higher levels of job satisfaction when leaders and subordinates have similar personalities. However, to some extent this contradicts Germain (2011b) assertions. Although Germain (2011b) agreed that secure/secure follower/leader relationships are the most successful, she disagrees with the belief insecure attachments on the part of both leader and follower can be positive. On the contrary, Germain (2011b) indicated an anxious leader and an anxious follower have the highest risk of negative outcomes and dysfunction. Even though Germain (2011b) conceded the anxious/anxious dyad would probably stay committed to each other, she hardly labeled it a positive relationship as Keller (2003) proclaimed. In addition, Keller maintained avoidant/avoidant relationships were positive. However, Germain (2011b) insisted this type of relationship would work well in a technology field because avoidant individuals prefer working alone, but avoidant/avoidant relationships would not stand a chance in other fields.

Attachment and mentor/protégé relationships. A mentor is one who has been on the job long enough to understand the underpinnings of the organization. The purpose of mentoring is to help junior employees develop their careers. Besides career development, a mentor serves as psychosocial support for new employees (Russell, 2004). Mentor/protégé relationships are based on trust and require a willingness from both parties to participate. Attachment theory views mentor-protégé relationships as a “caregiver-care-seeker” (Germain, 2011b, p. 126) relationship

where the mentor serves as the attachment figure (caregiver) and the protégé is the care-seeker. High-quality mentors have good communication skills; are good listeners; are readily available; and encourage their protégés to develop critical thinking skills, which help protégés become less dependent on the mentor (Sciarappa, 2010). Just as the goal of a parent-child relationship is for the child to become independent, so is the goal of the mentor-protégé relationship.

Germain (2011b) stated many mentor-mentee relationships fail because of the lack of compatibility between the two parties. Therefore, putting two people together in this type of affiliation should not be done blindly. The mistake many organizations make is assuming two people can successfully work together and develop a good mentor-protégé bond just because they hired them to work within the same department that required a certain skill set. Even so, Berson et al. (2006) suggested attachment styles have a stronger influence at the beginning of mentor-protégé relationship becoming less important as the relationship matures.

Germain (2011b) described nine possible combinations of mentor-protégé dyads, not accounting for different gender relationships. Germain (2011b) asserted the secure mentor/secure protégé dyad is the most successful dyad because both individuals feel secure in the relationship; secure mentors exhibit care-giving behaviors and secure protégés exhibit care-seeking behavior. In addition, secure mentors do not feel threatened by the protégés' rise in the organization; on the contrary, secure mentors willingly share power. In addition, studies have shown secure-secure dyads are very effective in conflict resolution and have high social competency (Germain, 2011b). It is common for this type of dyad to extend their relationship outside of the workplace (Germain, 2011b).

The avoidant mentor/avoidant protégé dyad appears to be very functional as well because neither party places high demands on the other (Germain, 2011b). However, unlike the

secure/secure dyad, neither avoidant mentors nor avoidant protégés are likely to seek out conflict resolution because they do not place high value on relationships (Keller & Cacioppe, 2001). Both parties prefer to avoid conflict altogether and prefer to work alone (Germain, 2011b). Even though the avoidant mentor/avoidant protégé dyads appear to be functional, they are not always functional. For instance, this dyad may work very well in jobs in technology, but it is dysfunctional in health care or mental health care jobs where protégés need a positive and emotional connection to a mentor.

In contrast with the secure mentor/secure protégé dyad, Germain (2011b) explained the anxious mentor/anxious protégé dyad is the most dysfunctional dyad and is at the highest risk of negative outcomes, including sexual boundary violations. However, they are unlikely to end the relationship even though the relationship often becomes hostile because they tend to become overly dependent on each other. Moreover, Keller and Cacioppe (2001) contended anxious leaders/followers avoid addressing conflicts for fear of disrupting their relationship. Conversely, secure mentor/avoidant protégé dyads are less likely to last, mostly because avoidant protégés are resistant to change, exhibit unproductive behavior and are offended if mentors suggest alternative behaviors; avoidant protégés do not see the need for mentors and reject mentors' advice; avoidant protégés are sarcastic, argumentative, defiant, and undermine mentors as well as other leaders.

According to Germain (2011b) the secure mentor/anxious protégé dyad is also dysfunctional because anxious protégés are needy and jealous of other protégés, expect special treatment, feel anger towards mentors, are manipulative, are preoccupied with feedback but are generally unsuccessful in changing behavior based on feedback. In anxious mentor/secure protégé dyads, mentors often walk away from the relationship without cause; mentors exhibit

care-giving characteristics but for selfish reasons and in extreme cases, mentors resist protégés' attempts to become independent. Anxious mentors are demanding, controlling, and touchy; micromanage; and in the worst cases, stalk protégés. Contrary to anxious mentor/secure protégé dyads, in anxious mentor/avoidant protégé relationships, protégés tend to walk away from the relationship because they feel smothered by mentors who are seeking more closeness than protégés want (Germain, 2011b). The avoidant mentor/anxious protégé dyad is just as dysfunctional as the anxious mentor/avoidant protégé dyad. In this case, it is the mentees who are continuously seeking help even when they do not need it in an attempt to maintain a close relationship with mentors, which mentors do not want. Finally, there is the avoidant mentor/secure protégé dyad where mentors promote autonomy because mentors are psychologically unavailable and unresponsive. If avoidant mentors offer any help at all, it is career oriented absent of social support. Protégés will describe these mentors as angry and mean (Germain, 2011b).

Even though Germain (2011b) concluded there are occasions albeit limited when insecure attachment styles are functional in mentor/protégé relationships, Allen, Shockley, and Poteat (2010) asserted insecure attachments never serve well in mentor/protégé relationships. For instance, in a study, Allen et al. (2010) found anxious attachment had a negative impact on mentoring relationships because of the negative self-view associated with anxious attachment. In addition, Poteat, Shockley, and Allen (2015) explained protégés with anxious attachment are less likely to seek feedback from mentors and are less receptive to the feedback. This is due in part to anxious individuals' negative self-view, which would lead them to feel threatened by the feedback. However, if anxiously attached protégés perceive mentors as being fully committed to the relationship, the protégés would be willing to seek feedback and would be more accepting of

it. Conversely, Poteat et al. (2015) asserted mentors are less likely to provide feedback to anxiously attached individuals if the mentors perceive the mentees as lacking commitment.

It is evident in existing literature that attachment styles influence mentor/mentee relationships. Attachment style also appear to influence whether individuals are inclined to mentor at all. Wang, S., Noe, Wang Z., and Greenberger (2009) reported aside from the mentoring experience itself, anxious and avoidant attachment significantly influenced willingness to mentor. According to Wang et al., in any given mentor/protégé relationship, irrespective of the individuals' role as mentors or protégés, individuals scoring high in anxiety or high in avoidance were less likely to be interested in mentoring in the future. Wang et al. went on to say this unwillingness to mentor in the future is possibly due to the negative view of self or others these individuals demonstrate. Understanding attachment theory could prove beneficial for organizations with formal mentorship programs.

Advantages and disadvantages of insecure attachment styles. Everything discussed thus far gives the impression individuals with predominant insecure attachment styles are at a disadvantage from those who are predominantly securely attached. Ein-Dor et al. (2010) discussed a litany of maladies that afflict insecurely attached individuals. Amongst the difficulties avoidant individuals encounter, are fear of intimacy, lack of close relationships, susceptibility to erratic religious conversions, judged by peers as overly hostile, a propensity to be cynical about long-term relationships, inability to cope with stress, and a tendency to abuse alcohol and other substances as a coping mechanism (Ein-Dor et al., 2010). Anxious individuals have their own set of disadvantages which include obsessive preoccupation with romantic relationships with symptoms of jealousy, distrust, and lack of loyalty (Ein-Dor et al., 2010). In addition, anxious individuals tend to suffer from loneliness, low self-esteem, and lack of self-

confidence (Ein-Dor et al., 2010). Furthermore, anxiously attached individuals have blurred boundaries and tend to disclose too much indiscriminately (Ein-Dor et al., 2010). However, little attention is given to the advantages of avoidant or anxious attachment.

While much research has focused on disadvantages of insecure attachments, Ein-Dor et al. (2010) decided to investigate how some of the disadvantages could be advantageous under certain conditions. Their discussion centered around social defense theory (SDT), which posits that insecure attachment styles have adaptive advantages at the group level. Results of a study by Lavy, Barely, and Ein-Dor (2015) suggested that a strongly cohesive team with a variety of scores in anxious and avoidant attachment had better performance evaluations. Lavy et al. (2015) went on to say existing literature suggesting insecure attachment is linked to poor team performance has focused on individual functioning rather than on the effect of insecure attachments at the team level. Ein-Dor et al. (2010) stated insecurely attached individuals within a group can pick up on the blind spots of the securely attached. The example they provided was that of anxiously attached individuals, who would generally be hypersensitive to threats, would be able to recognize eminent danger before securely attached individuals would recognize it, and would be able to alert the group. In other words, the need for self-preservation would extend itself to the group.

In the fast-paced IT world, having a heterogeneity of attachment orientation would be an asset. Often IT teams are involved in projects with strict deadlines. Securely attached individuals are very efficient in problem-solving and very good at remaining emotionally stable in the face of a threat; while this is an advantage when the timelines are reasonable and project progress is going well, the securely attached may not always recognize possible threats to project success (Lavy et al., 2015). The anxiously attached on the other hand can prove to be an asset to the team

because they would be on the lookout for unforeseen issues and would quickly warn others of potential problems (Lavy et al., 2015). The avoidantly attached individuals' contribution to the team stems from a strong need for self-preservation that would move them towards identifying "escape routes" in the presence of threats (Lavy et al., 2015), which in this case would be a threat to successful completion of a project. The "escape route" would be a way to correct any issues that are impeding project completion. The avoidantly attached are not very concerned with hurting people's feeling so they would do what needs to get done to complete the task. Thus, having a homogeneity of attachment styles within a team could make a team more effective.

Leadership Theory

There is no argument against the fact that leadership is a very important element in the success or failure of organizations, and leadership training is essential. Popular opinion in the United States is leaders are born and not made (Landis, Hill, & Harvey, 2014). This does not negate the need for leadership training. Nonetheless, Landis et al. (2014) emphasized leaders should have characteristics and behaviors that are unmistakable to those around them. Not everyone given the role of leader is effective as a leader. This is often evident in the IT world. Rosete and Ciarrochi (2005) were concerned that while many working in technical positions could be highly effective when it comes to performing complex tasks and producing company outputs, they might not be as effective if they were given the task of leading others. People can tell when they have a leader in their midst whether the leader holds the title of leader or not. Landis et al. (2014) argued leaders arise out of circumstances or situations that require certain types of actions.

The study of leadership throughout the years has been inadequate because very little attention has been given to context and to the role of followers in leadership success (Avolio,

2007; Tourish, 2014). In addition, research on leadership development has mostly focused on changing the leader with little attention given to context or leader\subordinate relationships (Avolio, 2007). Tourish (2014) insisted organizational success involves more than good leadership. It involves “good-followership” (Tourish, 2014, p. 80). Followers are the ones who empower leaders and who strongly influence leader behavior (Avolio, 2007). Continuing to research all the elements of leadership will pave the way to better answer the culture question and the effective leadership style question as well as the big question of whether leaders are born or made.

Because leaders are those who have the responsibility to influence followers, it is imperative for leaders to know their leadership style and how their style positively or negatively influences subordinates’ performance. For example, transactional leaders, motivate employees through goal setting and providing rewards and punishments. Furthermore, transactional leaders encourage performance through proper training and providing adequate resources such as technology and equipment (Wofford & Goodwin, 1994). However, leaders need to be aware of their followers’ strengths and weaknesses, capitalizing on those strengths and guiding the followers towards improving those areas of weaknesses.

Sethuraman and Suresh (2014) concluded, as other researchers have, leadership style can be learned, and it can be adjusted depending on follower needs. Leadership style can be acquired through leadership training as well as through experience; in other words, leadership style involves more than just personality traits; it involves cognitive processes (Wofford & Goodwin, 1994). There are a variety of theories to explain leadership. Dinh et al. (2014) asserted there are at least 66 different leadership domains. It would be impossible to cover all areas of leadership within this document; suffice it to say despite all the leadership discussions, there is much that

remains to be explored. This document briefly discusses a handful of theories. However, the focus of the present study was transactional and transformational leadership theory.

Trait theory. Trait theory suggests there are certain personality characteristics leaders possess, which distinguishes them from other individuals. Trait theory proclaims leaders are born and assumes a set of physical and personal characteristics move individuals to consistently behave the same way in a variety of situations (Sethuraman & Suresh, 2014). Trait theory evolved from the *great man* theory, and in its onset, researchers were hopeful the identification of these necessary traits would help in personnel selection (Hernandez, Eberly, Avolio, & Johnson, 2011). However, traits alone proved to be insufficient in determining leader effectiveness (Hernandez et al., 2011).

Behavioral theory. Emphasis is placed on behaviors that are commonly displayed by leaders (Hernandez et al., 2011). In opposition to trait theory, behavior theory assumes leaders are made and not born (Sethuraman & Suresh, 2014). Once again behavior alone was unsuccessful in predicting leader effectiveness (Hernandez et al., 2011). Both trait theory and behavior theory imply success or failure is at the hands of leaders without considering followers and other factors.

Contingency theory. Scholars were not satisfied with the identified limitations of trait theory or behavior theory in explaining leader effectiveness. Consequently, a new theory to explain the variance emerged; that is, contingency theory, which has attempted to include context in leadership studies when explaining the relationship between leadership traits and performance (Avolio, 2007). Contingency theory considers situational factors as well as internal and external contingencies when determining leader effectiveness (Avolio, 2007; Hernandez et al., 2011). The three situational factors that determine leader effectiveness are leader/follower

relationship, subordinates' tasks structure, and leaders' position power (Sethuraman & Suresh, 2014). Avolio (2007) listed external contingencies as organizational structure, strategy, stability, position, tasks, climate strength, social and physical distance, technology, and culture whereas the internal contingencies Avolio listed include leaders' personal qualities, followers' experience, followers' personalities, gender, motivation, and cultural orientation (Avolio, 2007, p. 27).

Social exchange theory. Contemporaneous to contingency theory was social exchange theory, which focused on leader-follower relationships and questioned whether the same leadership style would be effective for all followers (Hernandez et al., 2011). Attachment theory research has contributed to the discussion of leadership style effectiveness indicating all followers are not receptive to the same leadership approach (Keller, 2003; Richards & Hackett, 2012; Sigalit & Mikulincer, 2009).

Transformational Versus Transactional Leadership

Transactional leadership is one of the most familiar leadership styles, and it is more effective than transformational leadership in daily organizational function management (Rada, 1999). Bass (1990) stated transactional leadership relationships involve two primary factors. The first factor is identifying and organizing the tasks, and the second factor is consideration of employees' self-interest (Bass, 1990, p. 20). In other words, leaders make sure the employees understand what is required of them, but leaders also understand what employees require, each side fulfilling their requirements. There are three types of transactional leaders. First, leaders who use contingent rewards offer rewards in exchange for performance. Second, leaders who use active management by exception will act before subordinates' behaviors become problematic. Third, leaders who use passive management by exception will wait for subordinates' behavior to

become problematic before acting (Giltinane, 2013). Passive transactional leaders will be quick to enforce the consequences of poor performance but slow to recognize subordinates' positive contributions (Basham, 2012). Bass (1990) argued transactional leaders using the management by exception approach are more than likely headed for failure.

Management by exception involves punishing negative behavior or addressing issues rather than preventing them. Contingent rewards, on the other hand, were found to be an effective way of improving employee performance (Waldman et al., 1990). Offering rewards in and of itself does not necessarily encourage better performance. On the contrary, Waldman et al. (1990) argued rewarding subordinates without referencing their performance or punishing subordinates even if they do not deserve it negatively impacts employee performance. Nevertheless, Bass (1990) asserted the degree of transactional leadership effectiveness depends highly on how much control leaders have of rewards and punishment, and whether employees are interested in the rewards or are in fear of the disciplinary actions.

Bass (1990) insisted transformational leadership is superior to transactional leadership. Transformational leadership goes beyond rewards and punishment; it can occur at any level within an organization and is not necessarily top-down (Rada, 1999). It involves inspiring individuals to do better through awareness and acceptance of the mission, moving employees to act for the good of the group and not so much for self-interest (Bass, 1990). Transformational leadership is more effective than transactional leadership in moving organizations towards change (Rada, 1999). However, Tourish (2014) criticized transformational leadership rhetoric as one that stresses the need for leaders to force their vision and values onto followers, albeit through inspirational and intellectual stimulation, disregarding the impact these values and vision could have on individuals and group cohesion. Furthermore, Tourish stated transformational

leaders' empowerment of followers boils down to empowering followers to follow the leaders' vision. A great deal of transformational leadership involves "converting" the followers; in other words, it involves persuading the follower to set aside personal beliefs, needs, and values for those of the leader (Kuhnert & Lewis, 1987).

Bass, Avolio, and Goodheim (1987) suggested there are two orders of exchanges in the leader-subordinate relationship, the lower-order and the higher-order. Generally, transactional leaders are involved in a lower-order exchange with their subordinates where the subordinates and leaders agree to exchange performance for rewards whereas transformational leaders practice a higher-order exchange with their subordinates where they motivate subordinates to work for universal goals and for self-actualization (Bass et al., 1987). Even in the lower-order exchange used by transactional leaders, there is a low-quality or a high-quality exchange. Kuhnert and Lewis (1987) explained a low-quality exchange involves contractual agreements such as eight hours of work for eight hours of pay. High-quality exchanges include contractual agreements with the addition of the human element; in other words, it involves leader/subordinate interpersonal bonds (Kuhnert & Lewis, 1987).

Bass and Avolio (1993) postulated organizations require both transactional and transformational leaders. Transactional leaders are the ones who stick to the organizational rules, procedures and norms while transformational leaders view the history of the organization with respect and consider the history an inspiration to move towards the future. Bass and Avolio (1993) explained transformational leaders generally see people as trustworthy and purposeful. Furthermore, transformational leaders believe everyone has something to offer and complex problems are solved at the lowest level possible (Bass & Avolio, 1993). The same leader can display both transactional and transformational leadership styles by using contingent rewards and

being charismatic (Waldman et al., 1990). There is nothing in the literature that suggests transformational leaders do not use contingent rewards or that transactional leaders do not possess a high level of charisma. As a matter of fact, a study by Waldman et al. (1990) demonstrated charisma strengthens the effectiveness of leaders' contingent-reward behavior. Waldman et al. (1990) went on to say it is possible to train leaders to display more charismatic behaviors. Thus, leaders who are strongly inclined towards a transactional leadership style, could learn to show charisma, which will maximize their effectiveness (Waldman et al., 1990).

Bass and Avolio (1993) characterized transactional culture as focused on explicit and implicit contractual agreements; responsibilities are clearly spelled out as well as the rewards or punishments; self-interests take precedence; commitments are short-term and are only as deep as the organization's ability to reward; individuals tend to work as independently as possible; and cooperation depends more on negotiations than on problem solving (Bass & Avolio, 1993, p. 116). Bass and Avolio (1993) insisted leaders should accept that organizational procedures and norms are an evolving process, which should be adaptable to change as the world changes. Sometimes transactional leaders go to an extreme when enforcing the rules, allowing no deviation. Conversely, Bass and Avolio (1993) described transformational culture as having a feeling of family and a sense of purpose; a desire of leaders and subordinates to work towards common goals; leaders serve as mentors and coaches; and there is communication among all levels within the organization.

There are unique moral components for each of the leadership factors that relate to each of the leadership styles. According to Kanungo (2001), situational and teleological ethics provide the moral defense for transactional leaders whereas universal and deontological ethics provide moral justification for transformational leaders. Bass and Steidelmeier (1999) proclaimed the

ethical concerns raised by a task driven approach, such as the one transactional leaders favor, is whether the end justifies the means. In other words, it is not just important to get the job done, it is just as important to do it in a way that is morally and legally right. The rewards system should not offer incentives or incorporate sanctions that offend people's conscience or impedes people's freedom (Bass & Steidlmeier, 1999). If transactional leaders use contingent rewards and management by exception to an extreme or to serve leaders' self-interests, they deny their followers the opportunity for autonomy, self-development, and self-determination, which borders on the lines of unethical behavior (Kanungo, 2001).

In discussing transformational leadership ethical concerns, Bass and Steidelmeier (1999) explained idealized influence, a basic element of transformational leadership, should be watchful for egoism or manipulation. Bass and Steidelmeier (1999) maintained a truly transformational leader would not have an *us* versus *them* mentality where *we* would be the ones with good values and *they* would have questionable values. Bass and Steidelmeier (1999) referred to the "us" versus "them" leadership as pseudo-transformational. Others refer to pseudo-transformational leaders as personalized leaders who are characterized as being highly narcissistic and who tend to exploit others for personal gain (Popper & Mayselless, 2007). Conversely, true transformational leaders are characterized as socialized leaders who respect their followers and who fight for moral causes (Popper & Mayselless, 2007). The differences between socialized leaders versus personalized leaders are entrenched in early childhood experiences where socialized leaders most often report an emotionally stable and supportive upbringing, and personalized leaders report a childhood deprived of emotional support (Popper & Mayselless, 2007). Popper and Mayselless (2007) went on to say socialized leaders gradually realize their capacity to lead whereas personalized leaders reported more of an epiphany of sorts.

Employees view transformational leaders as charismatic. Rafferty and Griffin (2004) insisted charisma is the most important dimension of transformational leadership. Charisma is essential for leader success; it gives leaders great power and influence and inspires subordinates to respect their leaders and to want to be like them (Bass, 1990). Nonetheless, Effelsberg et al. (2014) pointed out subordinates would be looking for the leaders' self-sacrifice first and would then follow the leaders' example. Thus, it is not enough for transformational leaders to be charismatic but to practice what they speak. Charismatic leaders and transformational leaders have essentially the same characteristics, including self-confidence, dominance, and strong personal convictions (Kuhnert & Lewis, 1987). Popper and Maysless (2007) explained self-confident leaders would be more likely to have face-to-face discussions with subordinates while those who lack self-confidence would prefer to stand behind rules and regulations or send subordinates to a superior to address issues. Self-confidence is characterized by low anxiety and an ability to function well under high stress situations (Popper & Maysless, 2007). In addition, both charismatic and transformational leaders are very good at articulating goals, building their image, and arousing motivation (Kuhnert & Lewis, 1987).

Recognizing individual differences is characteristic of transformational leadership (Bass, 1990). Individualized consideration sets aside transformational leadership theory from other leadership theories and consists of leaders paying close attention to individual needs and being supportive of their staff as well as being interested in staff development (Rafferty & Griffin, 2004). Individualized consideration is more evident in lower-level management than it is in upper management (Antonakis et al., 2003). In addition, several studies have shown transformational leaders are more nurturing and exhibit lower aggression and are less critical of their staff than transactional leaders (Popper & Maysless, 2007). Some have categorized

transformational leaders as heroes (Basham, 2012). Moreover, Popper and Mayselless (2007) presented evidence supporting transformational leaders being more of a feeling type personality rather than the thinking type. Additionally, research supports agreeableness, which is one of the Big Five traits, is one of the strongest predictors of transformational leadership (Popper & Mayselless, 2007).

Leadership and Culture

Although some may argue one leadership style is superior to the other (Bass, 1990), others will argue leadership style effectiveness is circumstantial. For example, it is expected collectivist cultures are more prone to following the vision of their leaders and organizations. Jung and Avolio (1999) hypothesized collectivist societies would do well with transformational leadership because transformational leaders are known to encourage subordinates to work towards goals that benefit the entire organization. Individualist societies are expected to be more focused on self-interests and personal goals; therefore, it is generally thought leaders should be transactional (Jung & Avolio, 1999; Bass & Steidelmeier, 1999). To some extent, results of Jung and Avolio's (1999) study supported their hypotheses. Collectivists led by transformational leaders were more creative than if they were led by transactional leaders. Conversely, individualists displayed more creativity when lead by transactional leaders. Nevertheless, Jung and Avolio (1999) conceded that in their study, individualists generated more short-term ideas when led by a transactional leader, but if led by a transformational leader the ideas generated were more of a long-term nature.

Even though some studies have suggested culture impacts leadership style preferences, there is evidence of a shift in philosophies due to a global marketplace and the Knowledge Era (Jayasingam, 2009; Jogulu, 2010). For instance, Jayasingam (2009) argued that in the past

Malaysian leadership was highly autocratic. Autocratic leaders dominate and control their subordinates with little to no flexibility, which was very effective in Malaysian culture because Malaysians revered their superiors and were taught to obey without question (Jayasingam, 2009). However, in a recent study, Jayasingam (2009) found there has been a shift in what Malaysian subordinates considered the most effective leadership style. This shift coincides with a change in the Malaysian economy that has moved from mostly agriculturally based to knowledge based, bringing with it a change in the workforce and a desire to move away from autocratic leadership to participative. Nevertheless, scholars should not ignore cultural differences in leadership research. On the contrary, because today's economy is driven by globalization and technology, it makes the corporate landscape more diverse and complex (Jayasingam, 2009; Uhl-Bien, Marion, & McKelvey, 2007).

Leadership and Attachment

Researchers are recognizing that to some extent leaders take on the role of parents as a guiding force and a secure base for followers (Popper & Mayselless, 2003). Popper and Mayselless (2003) suggested studying the dynamics of a good parent could provide insight of what it takes to develop a good leader. Increasingly, scholars are starting to note a link between attachment and leadership style. For example, Towler (2005) ascertained adults who had secure attachments with their parents are more likely to arise as charismatic leaders than those with insecure attachments. Additionally, in three separate studies, Popper et al. (2000) found a positive correlation existed between secure attachment style and transformational leadership. Conversely, results of another study showed avoidantly and anxiously attached managers were prone to inauthentic self-expression in the workplace (Lopez & Ramos, 2016).

Fraser (2007) cautioned against seeking out leaders who have a predominant secure attachment style because strengths can be found in any attachment style, and what needs to occur is self-awareness as well as drawing on the strengths of each attachment style. For example, Fraser declared himself to be of an ambivalent attachment style, and because of this, he is very aware of other people's feelings, which when viewed on the positive side, means he is inclined to be more supportive than others might be. Nevertheless, being very supportive could be a negative thing unless the individual offering the support is in tune with what support means to the other person. In other words, others might view this expression of support as micro-managing (Germain, 2011b).

Davidovitz et al. (2007) argued attachment styles influence leaders' capacity to lead. For example, anxiously attached individuals tend to appear weak and are so preoccupied with their own needs they either fail to respond to followers' needs, or they exaggerate followers' needs even when followers deny a need exists. On the opposite side of the spectrum are the avoidantly attached, who are prone to avoid any type of closeness, will neither offer comfort to subordinates nor seek comfort from subordinates, appearing as uncaring and out of touch; however, avoidantly attached leaders are very good at focusing on task completion (Davidovitz et al., 2007), which is characteristically like transactional leaders who are interested in an exchange of performance for rewards or punishment. In either case, Davidovitz et al. found insecure attachments appeared to be positively related to leaders' self-focused motives to lead.

Molero, Moriano, and Shaver (2013) approached the study of leadership style and attachment style from a different angle. Rather than exploring whether individuals with certain attachment styles were more prone to becoming transformational leaders or Laissez-faire leaders, they decided to investigate how leadership styles interacted with subordinates' development of

an attachment style to leaders. Molero et al. (2013) were concerned about how the developed attachment styles to leaders would affect employees in several areas, including job satisfaction, employees' perception of their leaders' effectiveness, employees' job performance, and employees' identification to the organization. What they found was a positive relationship between Laissez-faire leadership style and subordinates' insecure attachment to their leaders. In addition, Molero et al. found a positive relationship between subordinates' anxious attachment to their leaders when the leaders displayed a transactional leadership style. However, Molero et al. did not find a similar correlation existed between transactional leadership and subordinates' development of avoidant attachment to their leaders. Results of the study also demonstrated a negative correlation between subordinates' insecure attachments and the four variables previously mentioned. That is, job satisfaction, employees' perception of their leaders' effectiveness, employees' job performance, and employees' identification to the organization.

Perception

Perception is multidimensional. It is a combination of images, sensations, and percepts (Hochberg, 1956). In other words, perception is not just what is visible to all, but it is the individual interpretation of the construct. The interpretation of the scene is influenced by internal factors of motivation and past experiences (Hochberg, 1956). Perception is not equal to reality even though it is the reality for the individual who is experiencing it. For instance, just because a leader might perceive a subordinate as incompetent, does not mean the subordinate is truly incompetent. Chen, Lam, and Zhong (2012) suggested leaders who perceive their employees as incompetent are less likely to build strong relationship with their subordinates. Leaders' perception of their subordinates and those factors that might influence leaders' perception is a

topic worth exploring. The present study focused on how attachment styles affected IT middle-managers' perception of their employees' effectiveness.

Numerous studies have been conducted focusing on subordinates' perception of their leaders' effectiveness based on subordinates' attachment style (Berson et al., 2006). For example, Hansbrough (2012) found employees scoring high in attachment anxiety were more likely to perceive their leaders as transformational. Hansbrough indicated subordinates' unmet attachment needs serve as a reality filter, allowing anxiously attached subordinates to perceive their leaders as transformational whether leaders truly exhibited transformational leadership behaviors or not. Conversely, anxiously attached individuals were less likely to attribute transactional leadership behaviors to their leaders (Hansbrough, 2012). Moreover, in a study by Dewitte and DeHouwer (2011), they found that anxiously attached individuals as well as avoidantly attached individuals consistently demonstrated their proneness to perceive their attachment figures in a negative light. These results coincide with other research that supports insecurely attached individuals tend to have a negative view of others.

Information Technology and Management

To improve technical performance, it is essential to have managers who are good motivators; however, many IT managers do not understand the basics of motivation (Badawy, 2007). IT professionals are usually highly creative and want to know if they are going to be rewarded for what they produce rather than on how well they get along with others (Badawy, 2007). In addition, it is not uncommon for IT professionals to be more knowledgeable about their jobs than their managers (Lester & Parnell, 2006), which sometimes leads organizations to make the mistake of hiring or promoting highly skilled technical individuals to manage knowledge workers without taking into consideration that in many cases, these highly skilled professionals

do not have the interpersonal skills required to manage personnel (Lester, Parnell, Carraher, 2010). Lester et al. (2010) referred to highly skilled managers who lack interpersonal skills as *desktop managers*. In contrast with desktop managers are the *hybrid managers* who O'Connor and Smallman (1995) defined as those managers who have good business and organizational knowledge; IT knowledge and experience; interpersonal skills; communication skills; cognitive capabilities; and people oriented personality traits and behaviors (O'Connor & Smallman, 1995, p. 21).

It is important for IT managers to be well balanced. In other words, IT managers would benefit from being well versed in the workings of computer information systems in general as well as systems specific to the organization that employs them. In addition, it is essential IT managers have knowledge of the business side of the organization. Furthermore, IT managers serve as liaisons between non-IT professionals within the organization and the IT staff.

According to Lester and Parnell (2006), most organizations look for individuals with strong interpersonal skills to manage most departments; however, if an organization prefers to promote or hire highly skilled technical professionals to serve as managers for the IT department, the organization should put some effort into identifying whether the prospective managers also have the interpersonal skills needed to be effective managers. Lester et al. (2010) stated desktop managers tend to avoid conflict, particularly those related to people problems, hoping these problems will dissipate on their own. Additionally, desktop managers seek to please superiors without taking into consideration the needs of their subordinates. Lester et al. (2010) conducted a study in which they found a negative correlation between subordinate job satisfaction and desktop managers. Lester et al. (2010) also found a negative correlation between desktop managers and employee motivation.

There is limited research on leadership style and IT. Most of the literature related to leadership and IT has focused on managers' interpersonal skills or lack thereof (Bennett, 2009). Bennett (2009) was interested in IT staff's leadership style preference. They found no relationship between Laissez-faire leadership and subordinates' job satisfaction so long as the Laissez-faire leader did not interfere with subordinates' progress and subordinates were self-motivated and knowledgeable of their job. However, results suggested Laissez-faire leadership has a strong negative correlation to employees' desire to put in extra effort to get the job done as well as employees' assessment of leader's effectiveness in meeting employee needs. In addition, Bennett found transactional leadership could predict employee job satisfaction as well as employees' perception of leaders' effectiveness. However, transactional leadership did not show any significant correlation to employee extra effort. Conversely, results showed transformational leadership was positively associated with all three variables, extra effort, job satisfaction, and subordinates' perception of leaders' effectiveness.

Findings

A review of attachment theory literature has demonstrated there is increased interest on the effects of individual attachment styles in a variety of settings. Although the attachment behavioral system's onset is in infancy, no longer is research of attachment style limited to child/primary caregiver relationships or romantic relationships. Interest in attachment style in the workplace is continuing to grow. Researchers are finding associations between attachment styles and the quality of workplace relationship including but not limited to leader/subordinate relationships (Boatwright et al., 2010; Germain, 2011b; Keller & Cacioppe, 2001). Researchers have also shown concern about the influence attachment style has on employee burnout and job satisfaction. Research has shown those who have a predominantly insecure attachment style tend

to overcommit and not follow through. In some cases, over-commitment was due to insecure individuals' desire to please and be liked. However, research has also demonstrated insecurely attached leaders are often very difficult to please. It would appear such a combination has the potential of creating an atmosphere that could influence managers' perception of employees' effectiveness, which formed part of the basis of the present study. That is, whether there were significant differences in how IT middle-managers rated their employees' effectiveness based on IT middle-managers' attachment style.

Based on attachment style, individuals develop internal working models of self and others that influence their approach to a multitude of situations in their lives. In addition, researchers have noted characteristics associated with the attachment behavioral system and those associated with leadership styles. For instance, numerous studies have shown securely attached individuals have characteristics comparable to those of transformational leaders. The present study was interested in exploring attachment styles and perception. Research leaves little doubt attachment styles affect how individuals perceive themselves and others. Those with insecure attachments seem to perceive others in a less favorable light. Literature on attachment styles and the workplace reflects subordinates judge the effectiveness of their leaders based on subordinates' attachment style. Additionally, subordinates' attachment style influences their perception of their leaders' leadership style. Less is known about leaders' attachment style and its effects on leaders' perception of their employees, which highlights the importance of the present study.

A review of transformational and transactional leadership theory research has revealed there is substantial amount of information in the scientific community describing characteristics associated with both these leadership styles (Bass, 1990; Bass & Avolio, 1993; Waldman et al.

(1990). In addition, there are numerous studies discussing transformational and transactional leadership effectiveness (Bass, 1990; Popper & Maysless, 2007; Rada, 1999). Furthermore, the literature review uncovered several studies discussing subordinates' perception of their leaders' effectiveness based on their leaders' leadership style (Effelsberg et al., 2014; Jayasingam, & Cheng, 2009; Sethuraman, & Suresh, 2014). However, there is a gap in the literature regarding leaders' perception of their employees' effectiveness based on leaders' leadership style. The present study aimed to fill in the gap in existing transformational/transactional leadership theory literature by examining the differences in IT middle-managers' perception of their employees' performance based on IT middle-managers' leadership style. In addition, the present study examined how leadership styles interact with attachment styles when IT middle managers evaluate their employees' effectiveness.

Critique of Previous Research Methods

Although research on attachment style in the workplace is extensive, most of the research seems one-sided, mostly focusing on subordinates' attachment style. The same holds true for leadership style. Most research on leadership is in the context of employee effectiveness in one way or another. In other words, the focus has been on effects of one leadership style versus another on subordinates' behavior and wellbeing. Furthermore, researchers have given a lot of attention to subordinates' perception of their leaders with much less interest placed on leaders' perception of their employees. Considering the possible impact leaders have on subordinates, more attention should be given to leaders' perception of subordinates. Perception is a multidimensional construct, which includes the interpretation of current situations based on past experiences.

Like perception, relationships are complex. Relationships are the interaction of a variety of factors. Attachment style appears to be a fundamental element. There is sufficient evidence supporting attachment styles are formed in early childhood and carried throughout the lifespan and that at least half the world population has a predominant insecure attachment style. Much of the research on attachment places a negative connotation on insecure attachment styles, which makes research on attachment difficult. One of the weaknesses in the study of attachment styles is its dependency on self-reports, which can be skewed because of what is considered more socially acceptable responses. Researchers have made it clear attachment style is not a categorical variable; therefore, when individuals are said to be securely or insecurely attached, it only means they scored higher on scales associated with an attachment style.

Although research on leadership styles seems to indicate leaders can be transformational or transactional, leadership styles like attachment styles are not categorical. Leaders are not purely transformational nor transactional; in fact, leaders have a combination of transactional and transformational leadership qualities. For this reason, the participants in the current research were categorized as transformational or transactional based on which behaviors they displayed most often, those associated with one style versus the other one.

Technology has exploded since the 1960's and 1970's. Technology is everchanging, requiring IT staff to be ready and willing to implement changes. Organizations need to stay informed of new technology that could improve their products, streamline processes, reduce costs, and attract new customers. Organizations also need to attract and retain highly skilled IT professionals to maintain the competitive edge in today's global economy. Dahling and Librizzi (2015) suggested studying attachment styles could add value to the study of retention and job turnover. However, their study failed to demonstrate any connection between attachment style

and retention. Notwithstanding numerous studies on attachment styles and leadership styles in the workplace, little attention has been given to the interaction of leadership styles and attachment styles within the IT industry. Bennett (2009) researched leadership style in an IT setting from the perspective of subordinates and how they perceived their managers. In addition, Bennett's study examined employees' effectiveness based on how they perceived their leaders' leadership style. The present study focused not on employees' effectiveness but rather on how IT middle-managers' perceived employees' effectiveness based on IT middle-managers' leadership style as well as their attachment style.

Summary

Although attachment style in the workplace has gained popularity throughout the years, there is much that remains unknown about the benefits of including attachment style theory in leadership training. Some have insisted it is impossible for businesses to presume they could change individual attachment styles since attachment styles are stable throughout the lifespan (Levy & Blatt, 1999; Richards & Hackett, 2012). Nevertheless, the idea would not be to change individual attachment styles, it would be to increase self-awareness. Much of the focus on leadership has been on leader success based on how well leaders can optimize employee performance and meet organizational goals. However, little is found on how leaders perceive their employees based on leaders' leadership style. In addition, when it comes to leadership and attachment, most research has focused on subordinates' perception of their leaders based on subordinates' attachment style. The present study attempted to add a different perspective by focusing on leaders' global attachment style as well as leaders' leadership style and leaders' perception of employees' effectiveness. Thus, the study is not interested in whether employees are more effective or less effective based on their leaders' attachment and leadership style, but

rather on how employees are perceived by their leaders irrespective of their actual performance. Organizational success is in part dependent on leader/subordinate interactions. This study intended to add another element to what is already known about said interactions by evaluating how leaders with contrasting leadership styles perceive their employees.

CHAPTER 3. METHODOLOGY

Evidence of the relevancy of attachment theory in the workplace has been growing as researchers continue to explore attachment style and a variety of constructs such as leader-follower dynamics (Harms et al., 2016), leadership development (Popper & Amit, 2009), and leader/subordinate perceptions (Berson et al., 2006; Keller, 2003; Keller, & Cacioppe, 2001). It has become apparent individual attachment styles formed in childhood are part of individuals' permanent makeup (Bowlby, 1982; Levy & Blatt, 1999; Richards & Hackett, 2012; Sable, 2008) and as such, are present in the workplace albeit not as something that is commonly measured or considered as an element of crucial importance. Nevertheless, researchers are continuing to study the importance of attachment style in the workplace. Even with everything that is already known about attachment styles and the workplace, there is so much that remains unknown. The present study aimed to add to the existing knowledgebase by evaluating whether IT middle-managers' attachment style has any bearing on their perception of their employees' effectiveness. Chapter 3 will discuss in more detail the purpose of the present study as well as the research design and methodology.

The present study was not limited to attachment style and its possible influence on IT middle-managers' perception of their employees' effectiveness. The present study also investigated leadership styles of IT middle-managers regarding their leadership style's influence on their perception of employees' effectiveness. Past studies have asked subordinates to measure their leaders' effectiveness based on the leaders' leadership style (Hsu & Chen, 2011;

Jayasingam & Cheng, 2009; Swid, 2014). There have also been several studies that have shown leaders are more nurturing and less critical of their employees based on their leadership style (Popper & Maysel, 2007). Although limited to IT middle-managers, the present study aimed to explore the question of leadership styles and perception of effectiveness from a different angle. That is, whether IT middle-managers' leadership style influences their perception of their employees' effectiveness. Finally, the present study wanted to examine whether a combination of IT middle-managers' attachment style and leadership style held any predictive value when it comes to their perception of employees' effectiveness. Chapter 3 will explain in detail the purpose of the present study; the target and sample population; the instruments used to gather information; the data collection and analysis; and ethical considerations.

Purpose of the Study

The purpose of this quasi-experimental study was to determine if differences exist in IT middle-managers' perception of their employees' effectiveness as measured by the EPQ (Lynch, Eisenberger, & Armeli, 1999) based on IT middle-managers' attachment style or leadership style. In addition, the study examined the predictive value of IT middle-managers' attachment style in conjunction with IT middle-managers' leadership style in relation to how IT middle-managers perceive their employees' effectiveness. The overall aim of this study was to add to the existing I/O psychology knowledgebase by identifying factors that could potentially hinder fairness of employee performance evaluations. Moreover, the present study sought to ascertain whether IT middle-managers' attachment styles or leadership styles would compel IT middle-managers to place higher demands on their employees.

Research Questions and Hypotheses

Research Question 1. When leadership style is held constant, do significant differences exist in IT middle-managers' perception of employees' effectiveness based on attachment style?

Null Hypothesis 1. No significant differences exist in IT middle-managers' perception of employee effectiveness based on attachment style when leadership style is held constant.

Alternate Hypothesis 1. Significant differences exist in IT middle-managers' perception of employee effectiveness based on attachment style when leadership style is held constant.

Research Question 2. When attachment style is held constant, do significant differences exist in IT middle-managers' perception of employees' effectiveness based on leadership style?

Null Hypothesis 2. No significant differences exist in IT middle-managers' perception of employee effectiveness based on leadership style when attachment style is held constant.

Alternate Hypothesis 2. Significant differences exist in IT middle-managers' perception of employee effectiveness based on leadership style when attachment style is held constant.

Research Question 2. Does a significant interaction occur between attachment style and leadership style in effecting IT middle-managers' perception of employees' effectiveness?

Null Hypothesis 3. No significant interaction occurs between attachment style and leadership style in effecting IT middle-managers' perception of employees' effectiveness.

Alternate Hypothesis 3. Significant interaction occurs between attachment style and leadership style in effecting IT middle-managers' perception of employees' effectiveness.

Expected Findings

The researcher expected H_{01} : No significant differences exist in IT middle-managers' perception of employees' effectiveness based on attachment style when leadership style is held constant, to be rejected because existing literature supports there are differences in individuals'

internal models of others based on attachment style (Boatwright et al., 2010). Although existing literature suggests transformational leaders and transactional leaders have different approaches when it comes to leader/subordinate exchanges with the former being focused on higher-order exchanges and the latter focusing on lower-order exchanges (Bass et al., 1987), up to date, there does not appear to be anything in the literature that would suggest leaders perceive their subordinates' effectiveness differently based on the leaders' leadership style. Therefore, the researcher did not expect to find significant differences in IT middle-managers' perception of employees' overall effectiveness based on leadership style when attachment style is held constant. Finally, because there is lack of evidence in existing literature that supports differences in leaders' perception of employees' effectiveness based on leadership style and because some evidence exists in the literature that indicates transformational and transactional leadership styles have characteristics similar to those found in certain attachment styles (Davidovitz et al., 2007; Manning, 2003; Popper et al., 2000), the researcher was expecting to accept the null hypothesis H₀₃: "No significant interaction occurs between attachment style and leadership style in effecting IT middle-managers' perception of employees.

Research Design

This quantitative study was quasi-experimental using a factorial design. This type of design is appropriate when participants are not randomly assigned to groups. The study has two independent variables and participants are selected because of a combination of characteristics that would place them in one of the groups formed by the combination of levels of the independent variables in the study (Montero & Leon, 2007). The two independent variables in this study were attachment styles, which had three categories (secure, avoidant, and anxious) and leadership styles, which had two categories (transformational and transactional). To measure

attachment styles, the EAS (Germain, 2011a) was administered, and the LSRS (Dussault, Frenette, & Fernet, 2013) was used to measure leadership styles. This study had one dependent variable, IT middle-managers' perception of their employees' effectiveness as measured by the EPQ. The 2x3 factorial design resulted in six groups depicted in Table 1.

Table 1.

Table X. Leadership*Attachment Groups			
Leadership Style			
		Transformational	Transactional
Attachment Style	Secure	Group 1	Group 2
	Avoidant	Group 3	Group 4
	Anxious	Group 5	Group 6

To reach out to the target population, administer the surveys and collect the data, the researcher employed the services of an online survey platform, Qualtrics LLC. One of the benefits of using an online survey company is easy access to a large participant pool from a variety of backgrounds. Brandon, Long, Loraas, Mueller-Phillips, and Vansant (2014) claimed that using an online service tool does not affect external validity any more so than using a more traditional method of recruitment and data collection. The researcher requested Qualtrics recruit a minimum of 100 participants. Prior analysis was conducted suggesting a minimum of 86. The researcher decided to add to that to make it at least 100 to make sure the minimum of 86 was met. Participants were not randomly assigned. Nonprobability purposive sampling was used. With purposive sampling, there generally is a purpose and a specific population in mind (Warner, 2013). In this case, the population was very specific; that is, only IT middle-managers were asked to participate.

The recruitment criterion was self-identified IT middle-managers. It is unlikely organizations have a job title middle-managers; therefore, potential participants were asked if

they considered themselves IT middle-managers. Only those who replied affirmative were included in the study. This was the first question in the survey, followed by demographic questions such as age and gender. Participants were not asked to provide their name, address or any other information that would threatened their anonymity. Once the initial demographic questions were answered, an adult informed consent for internet survey use was presented to participants. The consent form included the researcher's information as well as a description and purpose for the study. Only those potential participants who agreed to participate were directed to the proceeding questions; otherwise, a thank you message would appear on the screen before exiting from the survey. Followed by the consent form, was the LSRS, which would identify participants as either transformational, transactional, or Laissez-faire leaders. Those who scored into the Laissez-faire category were immediately excluded from the study. They would not see any additional questions but rather a message thanking them for their time. Once all the data was collected, the researcher used Statistical Program for Social Sciences (SPSS) Graduate Pack 23 for Windows to perform statistical analysis that will be described in more detail in Chapter 4.

The services Qualtrics provided were well suited for this study. First, it offered a platform that allowed the researcher to load and organize the questionnaires used in the study. Secondly, using Qualtrics, offered easy access to a nationwide participant pool within the United States. However, using an online service for purposive sampling has its limitations. Barratt, Ferris, and Lenton (2015) argued that although online purposive sampling has become very popular in social science research, the external validity of the results of such studies remains unknown. Barratt et al. insisted the results obtained should never be generalized outside of the "sample-at-hand" (Barrat et al., 2015, p. 6). Another serious threat to the validity of online surveys is non-serious answers (Aust, Diedenhofen, Ullrich, & Musch, 2013). That is, individuals who are not taking

the study seriously and are not answering questions honestly. Using Qualtrics rather than seeking participants through social media avenues possibly provides more reliable data. However, it does not eliminate respondents who were not serious. Aust et al. (2013) suggested asking respondents a series of attitudinal questions at the onset. In hindsight, the present study could have benefited from using the suggested approach. Aust et al. also suggested as a way of reducing respondents who were not taking the survey seriously, analyzing demographic responses for plausibility. An example would be respondents whose age and education level are inconsistent.

Target Population and Sample

Population

The population from which the sample size was drawn included any adult person within the United States who works in IT and is a self-defined IT middle-manager.

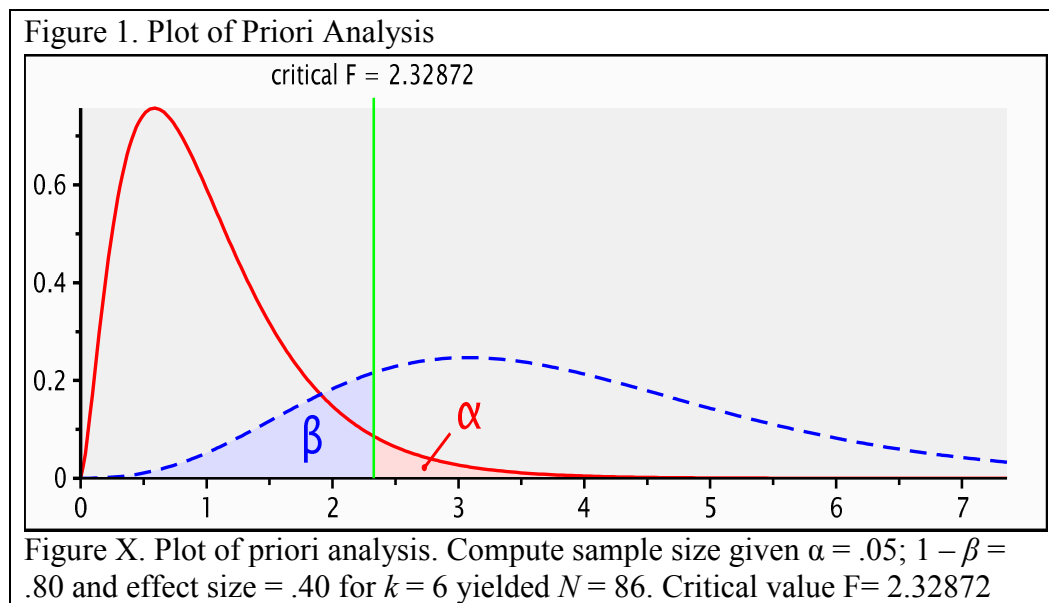
Sample

Demographics were collected at the beginning of the study. This included, gender, age, tenure, type of organization, position within the organization, and number of direct reports. It was important to gather this data at the beginning of the study to determine if respondents met the inclusion and exclusion criteria. Data were collected from self-identified IT middle-managers. In addition, respondents were required to have at least two direct reports. Excluded from the study were any respondents who considered themselves Laissez-faire leaders.

Power Analysis

While randomization increases validity and reliability, it is not always feasible or practical. Tripepi, Jager, Dekker, and Zoccali (2010) argued most threats to internal validity are a result of selection bias. To address the issue of selection bias, the researcher conducted a priori analysis. According to Mayr, Erdfelder, Buchner, and Faul (2007), using a priori analysis prior to

conducting the study is ideal because it gives the researcher the ability to control for both Type I errors (the probability of incorrectly rejecting the null hypothesis when it is true – probability α) and Type II errors (the probability of accepting the null hypotheses when it is false – probability β). Even though power and significance level are subjective, Farrokhyar, Reddy, Poolman, and Bhandari (2013) asserted the minimum significance level should be $\alpha = .05$ and power $\beta = .80$. Farrokhyar et al. suggested false-positives are more harmful than false-negatives. In other words, it is preferable to see Type II errors. The sample size was determined for a two-factor analysis of variance (Factorial ANOVA) using the online statistical software of G*Power (Faul, Erdfelder, Buchner, & Lang, 2009). A priori analysis for the statistical test ANOVA: fixed effects, special, main effects, and interaction was conducted with $\alpha = .05$; $1 - \beta = .80$; $df = 5$; $k = 6$; and a proposed effect size of .4. returned a minimum sample size of 86. The output of the priori analysis is presented in Figure 1.



Procedures

The following section will detail the steps followed for participant selection, which was carried out using nonprobability purposive sampling. In addition to discussing in detail participant selection, this section will explain what was done for the participants' protection, how the data was collected, and steps followed when performing data analysis.

Participant Selection

There are two types of sampling methods, probability sampling and nonprobability sampling (Setia, 2016). Probability sampling is based on chance whereas nonprobability sampling is not based on random selection but rather on a population that is accessible and available (Apostolopolous & Liargovas, 2016; Setia, 2016). In purposive sampling, the researcher considers the phenomenon to be studied, decides on a targeted group, and uses very explicit questions so specific individuals would be selected (Apostolopolous & Liargovas, 2016). For this study, the researcher was interested in IT middle-managers. Since it was not expected for organizations to have a job title of IT middle-manager, respondents were asked to state whether they self-identified as IT middle-managers.

Protection of Participants

Participants were not required to provide identifying information such as name, date of birth, or name of the organization where they were employed. In addition, participants were not required to provide any identifying information about their employees whom they were rating. Each participant was assigned an identification code based exclusively on the order they completed the survey. For instance, the first participant to complete the survey was identified as P1, the second one P2, and so on and so forth. The employees that the participants rated were given an identifier as EPQ1 and EPQ2. For example, participant P1 had two employees, P1EPQ1

and P1EPQ2. The raw data was stored by Qualtrics in a password protected folder for a limited time no more than one year. In addition, the data was downloaded to the researcher's password protected personal computer as well as a password protected external backup drive. The external drive was kept in a safe at the researcher's residence and will be destroyed after seven years as well as the data stored in the personal computer.

Data Collection

The researcher opted to use Qualtrics to collect the data because of Qualtrics' quick access to a large and diverse population and its ability to disseminate the survey. In addition, the researcher had the freedom to design the study without restrictions from Qualtrics. Furthermore, the instruments the researcher chose could be loaded with ease onto Qualtrics' website. First, the researcher loaded a set of demographic questions, followed by the LSRS, EAS, and the EPQ, which was loaded twice for each respondent. It was necessary to have the EPQ appear twice per respondent because one of the requirements for the research was for IT middle-managers to evaluate two of their direct reports. All the questions were listed as required, which forced respondents to enter an answer before proceeding to the next question. The survey was closed once it accumulated 100 completes.

The first question in the demographics section was: Would you consider yourself an IT middle-manager? Answering no to this question would immediately take respondents to the end of the survey, thanking them for their time, and marking the entries as incomplete. After the demographic questions were answered, the respondents were presented with a consent form that they were required to sign to participate. Once the consent form was signed, the first instrument, LSRS, was presented. This instrument would allow the classification of respondents as transformational leaders, transactional leaders, or Laissez-faire leaders. At this point, Laissez-

faire leaders were dropped from the study. No tracking was done of how many were dropped. The LSRS was followed by the EAS and finally the EPQ.

Data Analysis

Descriptive statistics. Demographic variables were evaluated by running frequency and central tendency measures. For gender, a frequency test was conducted to determine the number of subjects per gender. Frequency tests were done for each additional demographic variable, age, number of direct reports, years with current organization and years in current position within organization, which included mean, median, and mode. The two independent categorical variables of attachment style and leadership style were also tested for frequency. Finally, descriptive statistics were done for average employee rating per group (leadership style * attachment style).

Hypothesis testing. SPSS was used to perform statistical analysis. Two-way factorial ANOVA was used. A two-way factorial ANOVA can be used to test the main effect as well as the interaction effect of two categorical variables on a dependent variable. In this case, the dependent variable was IT middle-managers' perception of employees' effectiveness. The two categorical variables were attachment styles, with three levels (secure, avoidant, and anxious) and leadership style, with two levels (transformational and transactional). The attachment style groups as well as the leadership style groups were tested for normality using the Shapiro-Wilk test. To test the assumption of equality of variances across all six groups, the researcher conducted a Levene's test.

Multiple Imputation (MI) was used, which can be used when there is missing data due to nonresponse or due to drop out. MI can be when the researcher wants to maintain sample size to develop a good hypothesis. MI runs simulations on the missing data relative to the data that is

available to replace the missing data, and makes a probability judgement based on patterns of existing data values, replacing missing values with imputed values to create a full dataset. Before using MI, the assumption that data are missing randomly must be established.

Missing data can be classified in three ways: Missing Completely at Random (MCAR), Missing at Random (MAR), and Missing Not at Random (MNAR) (Rubin, 1976; Schafer & Graham, 2002). In MCAR data, the missing values are due to randomness and are not related to either observed variables or some potentially unobserved variables (Schafer & Graham, 2002). MAR data has a stricter definition, where the missing values are related to the ones already observed in the study (Schafer & Graham, 2002). Once the MAR data is controlled for the observed values, the resulting dataset becomes MCAR. MNAR data has the most stringent conditions, where the data is missing either due to other observed variables or due to some unobserved variables (Schafer & Graham, 2002). In the present study, the data is assumed to be MAR, and the missing values are replaced using the MI technique. The alternative is listwise or casewise deletion of the missing data, which can introduce bias in the analysis and reduce the overall power of the results (Manly & Wells, 2014).

Instruments

There were three instruments used in this study, which will be discussed in the order they were administered. These were preceded by seven demographic questions.

1. Would you consider yourself an IT middle-manager? (Y/N)
2. Age
3. Gender (Male/Female)
4. Number of direct reports
5. Years with current organization

6. Years within current position within organization
7. Which of the following best describes the organization that employs you (list of 6 options).

Leadership Self-Report Scale

The LSRS (Dussault et al., 2013) was used to measure the independent variable, leadership style. The LSRS is a 21-item scale based on Bass's (1985) transformational/transactional leadership model (Dussault et al., 2013). The LSRS uses a 4-point Likert scale where 1 = *completely disagree*; 2 = *disagree*; 3 = *agree*; and 4 = *completely agree*. Dussault et al. (2013) divided the 21 questions into three buckets. Each bucket represented a leadership style. That is, transformational leadership, which included Questions 1 through 12. Questions 14 through 16 as well as Questions 18 through 20 represented transactional leadership. Questions 13, 17, and 21 were designated as Laissez-faire leadership. Dussault et al. instructed participants to be placed in one of the three leadership categories based on their highest mean score. The researcher reached out to Dussault via email and received written consent to reproduce and use the instrument for the present study with no fee required. The researcher chose this instrument because it allowed for leadership style to be defined as a categorical variable, and because of its brevity. There were three questionnaires in addition to the demographic questionnaire included in this study, and the researcher was trying to reduce the required time it would take participants to complete the survey without sacrificing the study's integrity.

Validity. Dussault et al. (2013) tested the factor structure of the LSRS, by following a four-step procedure that included administering the initial 46-item version of the questionnaire. The first step involved using the classical test theory (CTT) to do an item analysis. CTT assumes individuals' observed scores on an item or sets of items are equal to the sum of their true score

obtained if there were no errors in measurement and an error score (Hammond, Malec, Nick, & Buschbacher, 2014). Secondly, Rasch analysis (RA) was used to identify overlapping and non-fitting items. According to Bond and Fox (2015), RA is a quality control test in that it measures how well an item fits within the underlying construct, and its aim is to help researchers make decisions about item misfit. The initial 46-item test was reduced to 21 items.

The third step was to do a confirmatory factor analysis (CFA) of the 21 items that remained. CFA is commonly used in psychological instrument development, and it involves testing researchers' hypothesis of an association between observed variables and their underlying constructs (Schmitt, 2011). The final step was to administer the condensed version to a new set of participants. Results showed a convergent validity of .70. Discriminant validity was established with an average variance not exceeding .50 for the 6 constructs (charisma, intellectual stimulation, individual consideration, contingent reward, management by exception, and Laissez-faire).

Reliability. The Rasch person separation reliability reflected a low Laissez-faire reliability, an acceptable intellectual stimulation reliability, and a satisfactory reliability for the remaining constructs (charisma, individual consideration, contingent rewards, and management by exception) (Dussault et al., 2013). Dussault et al., (2013) attributed the low Laissez-faire reliability to the difficulty in measuring the less desirable behaviors associated with this leadership style. Rasch item separation reliability was considered satisfactory for all six scales (Dussault et al., 2013).

Employee Assessment Scale

The EAS (Germain, 2011a) was used to measure attachment styles. Germain (2011a) does not require written consent to use the EAS if it is being used for educational or research

purposes. The EAS is an 11-item scale based on the Adult Attachment Scale (Hazan & Shaver, 1987/1990), which has shown both reliability and validity (Germain, 2011a). Germain (2011b) used her 11-item scale on mentor/mentee dyad research she conducted. The EAS uses a 5-point Likert scale where 1 = *strongly disagree*, 2 = *somewhat disagree*, 3 = *neither agree nor disagree*, 4 = *somewhat agree*, and 5 = *strongly agree*. Leung (2011) asserted using a 5-point Likert scale, which has a neutral choice is not inconsistent with 4-, 6-, or 11-point scales in terms of means, standard deviations, item to item correlations, reliability, exploratory factor analysis, or factor loading results.

This instrument was chosen because unlike other instruments that measure attachment styles, this one is short and to the point and categorizes individuals either as secure, anxious, or avoidant based on the highest mean score whereas other instruments such as the Experience in Close Relationships scale measure mostly insecure attachments in degrees (Fraley, Heffernan, Vicary, & Brumbaugh, 2011). Although it is not advisable to define attachment styles as a categorical variable (Fraley, Waller, & Brennan, 2000), Fraley (2012) conceded that for the purposes of a dissertation it is acceptable. Using the EAS, participants will be placed in a category (secure, avoidant, and anxious) based highest mean score. Germain (2011a) explained Questions 1 through 3 measure secure attachment, 4 through 8 represent avoidant attachment, and 9 through 11 represent anxious attachment.

Validity. Validity refers to how well a test measures what it purports to measure. The 11-items on the EAS come from the AAS (Hazan & Shaver, 1987/1990). The 18-item AAS was divided into three composites (Depend, Anxiety, and Close). To get to the three composites, Hazan and Shaver (1987) started with a 21-item scale, which they developed using the characteristics of attachment styles as defined in existing attachment literature (Collins & Read,

1990). Hazan and Shaver (1987) translated the three infant attachment styles into appropriate terms for adult relationships (Collins & Read, 1990) and conducted an exploratory factor analysis (EFA) on the 21 items. According to Collins and Read (1990), the initial orthogonal rotation demonstrated three items loaded into more than one factor. Orthogonal rotation assumes factors are not correlated. An oblique rotation was used to obtain the final answer. Oblique rotation allows for correlations. Collins and Read (1990) explained that after consideration of Kaiser's eigenvalue (K1) criterion and a scree test the three items were removed, leaving only 18 items. The K1 rule indicates that only items greater than one should be retained for interpretation (Ledesma & Valero-Mora, 2007). The Scree test is a visual representation of the eigenvalues. Cronbach's alpha for the Depend, Anxiety, and Close items were all reasonable: .75, .72, and .69 respectively (Collins & Read, 1990).

Germain (2011a) retained three items from the AAS for secure attachment, one item from each composite (Depend, Anxiety, and Close). For avoidant attachment, Germain selected two items from Depend and three from Close. None of the items under Anxiety correlated to avoidant attachment style; therefore, Germain chose none of these for her 11-item test. Finally, for anxious attachment, Germain chose three items under Anxiety although there was at least one item in Depend that correlated to anxious attachment. She opted to exclude it. Germain did not offer any explanation as to why she chose the items she did nor why she excluded the ones she did.

Reliability. Reliability is the degree to which an instrument produces stable and consistent results. There are various types of reliability test. The test-retest reliability measure is obtained by administering the same test to the same individuals more than once over a period. The scores from each time are correlated to evaluate the test for stability. The AAS (Hazan &

Shaver, 1987/1990) from which the EAS was drawn showed a test-retest correlation of Close=.68, Depend=.71, and Anxiety=.52 (Collins & Read, 1990). Germain (2011b) asserted the AAS has shown reliability as well as validity in numerous studies. In addition, Germain insisted the AAS is concise and therefore, a practical tool that could be used by HR professionals.

Employee Performance Questionnaire

The EPQ (Lynch et al., 1999) was used for IT middle-managers to evaluate their employees' performance. The authors do not require written consent if the questionnaire is being used for research or educational purposes. The EPQ is a 16-item scale based on a 5-point Likert scale where 1 = *disagree*, 2 = *somewhat disagree*, 3 = *neither agree nor disagree*, 4 = *agree*, and 5 = *strongly agree*. The researcher asked participants to randomly choose two of their employees and rate them using this scale, which measures two performance factors, in-role performance and extra-role performance.

Validity. Validity is not an absolute rather it is the degree in which empirical evidence supports inferences made from assessment scores (Messick, 1995). Messick (1995) asserted validity is a work in progress that over time gathers data to support or contradict previous findings. The 16-item EPQ is a combination of items from several instruments. To measure in-role performance, seven items were adapted from Williams and Anderson (1991) and two items were adapted from Smith, Organ, and Near (1983). Williams and Anderson (1991) conducted a factor analysis of a 21-item scale, oblique rotation ($N = 127$) from several Midwestern organizations within the United States. Only those items with the highest eigenvalue were included in the in-role performance factor and are the seven items Lynch et al. (1999) adapted.

Smith et al. (1983) conducted a pilot study ($N = 16$ full time employed managers) using a 16-item instrument. The managers were asked to rate one of their employees and responses were

submitted to a factor analysis with communality estimates in the diagonals and using orthogonal varimax rotation. Results suggested two distinct factors, generalized compliance and altruism. Smith et al. proceeded to administer the same test to 422 individuals, with the results demonstrating a similar factor structure. Lynch et al. (1999) chose two of the items that had a loading of above 50 in the generalized compliance factor and below 50 in the altruism factor. It appears Lynch et al. considered generalized compliance to be the equivalent of in-role behavior and altruism to be equivalent extra-role behavior. Conversely, Lynch et al. chose one of the items in Smith et al. (1983) that had a loading of above 50 in the altruism factor and below 50 in generalized compliance as part of the extra-role measurement.

In addition to the one item from Smith et al. (1983) to measure extra-role performance, the EPQ included items adapted from McNeely and Meglino (1994); Moorman and Blakely (1995); and Van Dyne, Graham, and Dienesch (1994). According to Van Dyne et al., organizational citizenship behavior (OCB) is distinct from in-role performance and should be measured as extra-role performance. Van Dyne et al. went on to say OCB can be divided into three categories (obedience, loyalty, and participation). Van Dyne et al. created a 54-item OCB scale and tested it using employee self-report ($N=154$) and supervisor reports ($N=84$). Thirty-four items remained after exploratory factor analysis on the original data and confirmatory factor analysis on the cross-validation data. Lynch et al. (1999) adapted two of the items that represented participation.

McNeely and Meglino (1994) conducted a factor analysis on a 20-item scale that resulted in a three-factor structure. Two of the items loading above 50 in the prosocial organizational behavior factor and below 50 in the other two factors (role prescribed prosocial behavior and prosocial individual behavior) were adapted for the EPQ. There was one item adapted from

Moorman and Blakely's (1995) 19-item OCB scale, which had four factors (interpersonal helping, individual initiative, personal industry, and loyal boosterism). The adapted item was represented as part of individual initiative factor after Moorman and Blakely conducted a confirmatory factor analysis.

Reliability. Lynch et al. (1999) integrated items from several studies (McNeely & Meglino, 1994; Moorman & Blakely, 1995; Smith et al., 1983; Williams & Anderson, 1991; Van Dyne et al., 1994) with proven reliability that measured employee performance into one instrument they used to measure in-role and extra-role employee performance.

Ethical Considerations

The Belmont Report (1978) defines three basic principles that researchers should adhere to when conducting research. The first principle is respect for persons, which states individuals cannot be coerced into participating in a study. Researchers are required to provide potential participants with proper information regarding the study that will allow individuals to make an educated decision whether they want to participate in the study or not. The researcher must receive written consent from the potential participants. There are additional requirements if the potential participants are minors or do not have the capacity to provide consent. For the present study, all potential participants were adults with capacity to decide if they wanted to participate. The researcher provided a consent form denoting the parameters of the study in English at an 8th grade reading level. Only those participants who provided written consent could participate.

The second Belmont Report (1978) principle is beneficence, which involves identifying and minimizing any potential risk to participants. In addition to what was previously stated about the safeguarding of participants' privacy and confidentiality, the researcher must also consider psychological or physical harm. The researcher did not anticipate any physical harm would occur

because the study did not involve any physical activity, nor did it involve any traveling to and from a test location. However, whenever research involves asking individuals questions about their emotional state, there could be some risk of psychological harm. The present research included questions about individuals' attachment styles. Research has shown attachment styles are formed in early childhood based on relationships with primary caregivers (Bowlby, 1988). The instrument used in the present study did not include any questions related to childhood experiences. All the questions in the EAS were questions regarding participants' current approach to relationships in general.

The third principle in the Belmont Report (1978) is justice, which states there should be a fair balance between burden and benefit to participants. The present study did not entail providing or withholding any type of treatment; therefore, there was minimal burden to participants other than their time investment, which was not expected to exceed fifteen minutes. The present study received approval from Capella University's Institutional Review Board. It did not require additional approval from other agencies.

Summary

Chapter 3 described in detail the purpose of the present quasi experimental study, which explored attachment styles and leadership styles of IT middle-managers in reference to how they perceive their employees' effectiveness. The combination of three levels of attachment style (secure, avoidant, and anxious) and two levels of leadership style (transformational and transactional) generated six groups. A two-way factorial ANOVA was used to test the main effect as well as the interaction effect of the two categorical variables (leadership style and attachment style) on the dependent variable (IT middle-managers' perception of their employees' effectiveness). The validity and reliability of the three instruments used, (EPQ, LSRS, EAS) was

discussed. A step by step account of the data collection and analysis was given, which included describing the sampling process, nonprobability purposive sampling, and explaining the nature of quasi-experimental designs that allow for nonrandom assignment of participants. The researcher used the services of an online survey company, Qualtrics, LLC., to load the surveys and disseminate them across the United States via their website. In addition, Qualtrics gathered the data. Ethical considerations, including the three basic principles defined in the Belmont Report (1978) were explained. The three research questions with their corresponding hypothesis as well as the expected findings were restated. Chapter 4 will present the results of the study, explaining the statistical analysis used supported by tables and figures.

CHAPTER 4. RESULTS

Background

Chapter 4 expands on the data collection and analysis presented in Chapter 3. This chapter begins with a description of the sample, including sample size and demographic details. It is followed by a summary of the missing data and descriptive statistics as well as the statistics performed to test each hypothesis. This Chapter will not provide an evaluation of the results, which will be covered in Chapter 5.

Description of the Sample

The sample size consisted of $N = 100$ adults living within the United States who self-identified as IT middle-managers and had at least two direct reports for whom they were responsible to provide performance reviews. 69% of the participants were male, $N = 69$, and 31% $N = 31$ were females, which is representative of the United States population. According to the United States Census Bureau, in 2014, 72% of IT managers were males and 28% females (U.S. Census Bureau, 2014). Participants ranged in age between 26 and 66 with the median age being 35. Most participants, 76%, reported having 30 or less direct reports. The average number of years participants worked for their current company was 9.46. Of the 100 participants, there were only $N = 70$ who fell into one of the six groups (leadership style * attachment style) before conducting MI. The groups were considered nonorthogonal because there was not an equal number of participants per group. In the transformational*secure group, there were $N = 32$ with

$N = 15$ in the transactional*secure. In the transformational*avoidant, $N = 10$; transactional*avoidant $N = 3$; transformational*anxious $N = 8$; and transactional*anxious $N = 2$.

Data Inspection

The instrument used to measure attachment style, EAS, (Germain, 2011a), as well as the instrument used to measure leadership style, LSRS (Dussault et al., 2013), allowed for the classification of participants into an attachment style category and leadership style category respectively based on the highest mean score for any given category. However, neither instrument made concessions as to how to evaluate or categorized those participants whose mean scores were equal across categories. For this study, it was necessary to label participants as secure, avoidant, or anxious attachment as well as transactional or transformational leadership. Upon inspection of the data, it was discovered multiple participants could not be identified as a having a specific attachment style or a specific leadership style because their average mean score was equal across categories. In addition, there was one participant, P43, who entered the value of 222 for years with current company, years in current position within the company, and number of direct reports. It was unclear if this was a typo or the participant's attempt of non-responsiveness.

There are various ways to handle missing data. The most commonly used technique is listwise or casewise deletion, which excludes those participants who had any missing data (Kang, 2013). However, when the sample size is small, this is not the best approach because it has higher probability of introducing bias (Kang, 2013). The priori analysis conducted for the present study suggested a minimum sample size of $N = 86$. If this study would have used listwise deletion, the sample size would have been reduced to $N = 69$. A better strategy for handling missing data when sample sizes are small is MI (Kang, 2013). According to Kang (2013), MI

replaces missing data in the variables with a set of probable values based on the existing data from other variables. A new dataset is generated using the predicted values. As the term MI implies, there are several datasets generated, one for each set of imputed values. Although researchers have suggested a minimum number of imputations on theoretical grounds be five to ten (Allison, 2000; Kenward & Carpenter, 2007), others advised increasing the number of imputations to 100 decreases the power falloff, and with today's available statistical software packages that make conducting analysis much quicker it is something that should be considered (Graham, Olchowski, & Gilreath, 2007). Given these recommendations, for this study, the researcher chose to generate 100 multiple imputed datasets. Each dataset was then analyzed using standard statistical analysis and eventually combined to provide an overall analysis.

One hundred imputed datasets were created using the SPSS fully conditional specification (FCS) or chained equations imputation. An incomplete variable is imputed one at a time and the filled-in variable from one step is used as a predictor in all subsequent steps. The variables attachment styles, leadership styles, years with current company, and years in current position within the organization were imputed and used as predictors, while direct reports, gender, rating for employee 1, rating for employee 2 and average employee rating were used as predictors only, since there were no missing values in these categories. The pooling procedure used Rubin's rules, where the final estimate of the mean is the average of individual ones across the one hundred imputed sets and the estimated total variance is calculated as $T = \text{average within-imputations variance} + (1 + \frac{1}{5}) * \text{between-imputations variance}$ (IBM Knowledge Center, 2016).

The results for the original dataset (with casewise and listwise deletion), as well as the pooled imputed results (where available), were reported. Results for the statistical tests were not

pooled, unless the Rubin rules could be applied. The percentage of missing values per variable are presented in Table 2.

Table 2.

Table X. Missing Data Information

Variable	Complete	Missing	Percent Missing
Direct reports	99	1	1.00
Age	100	0	0.00
Yrs with current company	99	1	1.00
Yrs in current position	99	1	1.00
Attachment styles	90	10	10.00
Leadership styles	76	24	24.00
Rating for employees 1	100	0	0.00
Rating for Employee 2	100	0	0.00
Avg employee rating	100	0	0.00

Descriptive Statistics

The pooled descriptive statistics for the average employee rating per group (leadership style * attachment style) are presented in Table 2. Interestingly, the largest value in the transactional group was for the anxious attachment style ($M = 4.016$, $SE = .278$), while for the transformational group the largest value was for the secure attachment style ($M = 3.996$, $SE = .073$). The smallest rating occurred in the transactional leadership style, avoidant attachment style ($M = 3.809$, $SE = .232$), while the largest rating was in the transactional leadership style, anxious attachment style. This large rating in the transactional, anxious group is not in line with the trend observed for the other groups, where the anxious group scored the lowest in the transformational leadership style group.

Table 3.

Table X. Pooled Descriptive Statistics for Average Employee Rating per Group

		95% Confidence Interval						
Leadership	Attachment	Mean	Standard Error	Lower	Upper	Fraction Missing Info	Relative Increase Variance	Relative Efficiency
Transformational	Secure	3.996	.073	3.853	4.139	.204	.256	.998
	Avoidant	3.901	.126	3.654	4.148	.155	.183	.998
	Anxious	3.820	.132	3.562	4.079	.182	.221	.998
Transactional	Secure	3.830	.104	3.625	4.034	.226	.290	.998
	Avoidant	3.809	.232	3.354	4.264	.092	.101	.999
	Anxious	4.016	.278	3.470	4.562	.186	.228	.998

Assumptions Tests

The attachment style groups and leadership style groups were tested individually for normality using the Shapiro-Wilk test. The results revealed that the scores in the anxious group were normally distributed for all the imputations, with the statistic varying between .913, $p = .973$ and .984, $p = .120$. Similar results were obtained for the scores in the avoidant group, with the statistic varying between .950, $p = .916$ and .978, $p = .418$. In contrast, the scores from the secure group could not be conclusively declared normally distributed, with the statistic varying between .942, $p = .101$ and .970, $p = .010$. There were more imputations with the data not normally distributed at the 95% significance level, indicating it is likely the data was not normally distributed. The scores in the transactional group were normally distributed for all the imputations, with the statistic varying between .959, $p = .990$ and .990, $p = .325$. Conversely, only some of the imputations had normally distributed scores in the transformational group, with the statistic varying between .952, $p = .382$ and .980, $p = .025$. There were more imputations with the data normally distributed at the 95% significance level, indicating it is likely the data was normally distributed.

The Levene's test of equality of error variances was met for all the imputations, indicating that the data met this assumption. The statistic varied from $F(5,94) = 1.756, p = .130$ for the eighth imputation to $F(5,94) = .070, p = .996$ for the forty fifth imputation.

Hypothesis Testing

Research Questions

Question 1. When leadership style is held constant, do significant differences exist in IT middle-managers' perception of their employees' effectiveness based on attachment style? The null hypothesis that there were no significant differences in IT-middle managers' perception of employees' effectiveness based on attachment style when leadership style was held constant failed to be rejected. The 2X3 ANOVA revealed that the attachment style main effect was not statistically significant for any of the 100 imputations, with the statistic varying between $F(2,94) = 0.005, p = .995$ and $F(2,94) = 1.198, p = .306$. The effect size was small and varied between $\eta^2 = .000$ and $\eta^2 = .025$.

Question 2. When attachment style is held constant, do significant differences exist in IT-middle managers' perception of their employees' effectiveness based on leadership style? The results were similar to the results for the first research question. That is, the null hypothesis that there are no significant differences in IT-middle-managers' perception of their employees' effectiveness based on leadership style when attachment style was held constant could not be rejected. The leadership style main effect was not statistically significant for any of the 100 imputations, with the statistic varying between $F(1,94) = 0.000, p = .996$ and $F(1,94) = 1.537, p = .218$. The effect size was small and varied between $\eta^2 = .000$ and $\eta^2 = .016$.

Question 3. Does a significant interaction occur between attachment style and leadership style in effecting IT middle-managers' perception of their employees' effectiveness? Although

there was one imputation out of the 100 imputations that showed a statistically significant interaction, as with the other two research questions, the null hypothesis that no significant interactions occur between attachment style and leadership style in effecting IT middle-managers' perception of their employees' effectiveness could not be rejected. The statistic varied between $F(2,94) = 0.006, p = .994$ and $F(2,94) = 4.218, p = .018$. In addition, the effect size was small and varied between $\eta^2 = .000$ and $\eta^2 = .082$.

Summary

This chapter presented the statistical results of the study which show the null hypothesis was accepted for each one of the research questions. In other words, there were no statistically significant differences in IT middle-managers' perception of their employees' effectiveness based on IT middle-managers' attachment style when their leadership style was held constant; there were no differences in IT middle-managers' perception of their employees' effectiveness based on IT middle-managers' leadership style when their attachment style was held constant; and the interaction between IT middle-managers' attachment style and their leadership style did not have any predictive value that would indicate how they would perceive their employees' effectiveness. Chapter 5 will provide insights about the study, discussing the results in terms of implications, limitations, and future research recommendations.

CHAPTER 5. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

This chapter examines the results that were presented in Chapter 4 with the purpose of providing more meaning for the field of psychology. It covers conclusions based on the results as well as the limitations of the study. In addition, Chapter 5 discusses implications for practitioners including leaders in the IT field, I/O psychologists, consultants and other key stakeholders considering existing research. Moreover, it offers suggestions for future research that will expand further upon the knowledge of attachment in the workplace. Chapter 5 concludes with a summary of key findings, implications, and future directions for research because of this study.

Summary of the Results

The study of attachment is no longer limited to parent/children relationships or romantic relationships, which was the emphasis of initial research. Around 1994, the focus started to expand with Khan and Kram suggesting adult attachment is activated in the workplace when individuals' internal working models of authority are manifested in hierarchical dyads. In recent years, interest in attachment style and the workplace has continued to grow (Harms, 2011). Attachment research has shown individuals' view of self and others is influenced by their predominant attachment style (Boatwright et al., 2010; Harms, 2011; Hazan & Shaver, 1990). Additional research has suggested individuals with insecure attachments are more inclined to make negative assessments of others (Boatwright et al., 2010). The current study explored whether IT middle-managers' attachment style influenced how they perceived their subordinates'

effectiveness. A second interest in the current study was whether IT middle-managers' leadership style influenced their perception of their employees' effectiveness. Additionally, this study considered the predictive value of interactions between attachment styles and leadership style in IT middle managers' perception of their employees' effectiveness.

Discussion of the Results

Overall, the results of this study did not indicate significant interaction amongst the variables. However, to some degree, the results coincided with the expected findings. For instance, based on Popper et al. (2000) findings, the researcher speculated most transformational leaders would be categorized as having a secure attachment style. There were $N = 70$ participants who were assigned to one of the six groups (leadership style*attachment style). Of these, $N = 50$ self-reported as transformational of which $N = 32$ (64%) were in the transformational*secure group. These results confirmed results of previous studies that indicate a secure attachment formed in early childhood is a common characteristic among transformational leaders (Oliver et al., 2011). The present study focused on a specific subgroup, IT middle-managers, which indicates the same trend is visible in those whose career is in information technology.

Most participants self-reported a secure attachment style. There were $N = 90$ who fell into one of the three attachment style categories (secure, avoidant or anxious) of which $N = 61$ (67.78%) self-reported a secure attachment style. It was not surprising that most participants would score in the secure attachment style category because most existing literature emphasizes the negative qualities and weaknesses of insecurely attached individuals (Ein-Dor et al., 2010). As expected, anxious attachment style was the least reported. There were $N = 13$ (14.44%) who self-reported an anxious attachment and $N = 16$ (17.78%) as avoidant attachment.

Willcoxson and Chatham (2006) suggested that in contrast with managers in general who tend to demonstrate a people orientation, IT managers are more task oriented, which is a characteristic in common with avoidantly attached individuals and unlike anxiously attached individuals who are characteristically less interested in tasks than they are in relationships (Hazan & Shaver, 1990). Therefore, of the 70 participants who were assigned to one of the six groups (leadership style*attachment style), it was expected there would be significantly more individuals in the transactional*avoidant group than the other two groups (transactional*secure or transactional*anxious). However, this did not occur for transactional*avoidant and transactional*anxious there were $N = 3$ and $N = 2$ respectively. Once again, the secure (transactional*secure) group had the most participants, $N = 15$.

Hypotheses Testing

Alternate Hypothesis 1. Significant differences exist in IT middle-managers' perception of employees' effectiveness based on attachment style when leadership style is held constant, was rejected. The results showed IT middle-managers gave their employees an average rating of 3.857 - 3.913 irrespective of IT middle-managers' attachment style. The differences in rating by attachment style were not found to be statistically significant. Thus, in this study, IT middle-managers' attachment style was not found to have an influence on how they perceive their employees' effectiveness.

Alternate Hypothesis 2. Significant differences exist in IT middle-managers' perception of their employees' effectiveness based on leadership style when attachment style is held constant, was also rejected. This study did not find IT middle-managers would be influenced by their leadership approach when considering their employees' effectiveness.

Alternate Hypothesis 3. Significant interaction occurs between attachment style and leadership style in effecting IT middle-managers' perception of their employees' effectiveness, was rejected as was expected. Several researchers have argued individuals' attachment styles are characteristically similar to either transformational or transactional leadership (Davidovitz et al., 2007; Manning, 2003; Popper et al., 2000). Therefore, combining the two variables would not produce any significant interaction that would help predict IT middle-managers' perception of their employees' effectiveness. The following sections of this chapter will expand on what these findings mean to the scientific community.

Conclusions Based on the Results

Comparison of the Findings with the Theoretical

Framework and Previous Literature

Much has been said about attachment styles and individuals' view of self and others. Literature suggests individuals who have a predominantly insecure attachment style are predisposed to having a negative view of others whereas individuals with a predominant secure attachment are more inclined to view others in a positive light (Boatwright et al., 2010; Keller & Cacioppe, 2001; Levy, 2005; Sigalit & Mikulincer, 2009). In addition, research has suggested individuals might tap, albeit subconsciously, into internal working models based on attachment style when evaluating employee performance (Keller, 2003). Although research has suggested insecurely attached individuals have a propensity to view others in a negative light and possibly rate their employees more harshly, the present study did not detect significant differences in IT middle-managers' perception of their employees' effectiveness based on the IT middle-managers' attachment style. Furthermore, the findings did not coincide with research that has suggested avoidantly attached individuals are generally not satisfied with their coworkers'

performance (Hazan & Shaver, 1990). However, in the present study participants were evaluating subordinates and not peers, which could make a difference.

The design of the present study did not measure attachment styles by degrees but rather categorized individuals as one of three possible attachment styles (secure, avoidant, and anxious) based on highest mean score on the EAS. Evaluating attachment styles and IT middle-managers' perception of employees' effectiveness using a linear relationship evaluation might have demonstrated that a change in the independent variable attachment style could have produced a corresponding change in the dependent variable IT middle-managers' perception of employees' effectiveness. Researchers agree attachment style is not truly a categorical variable because individuals could score high on scales associated with more than one attachment style and no individual is entirely securely attached or insecurely attached (Fraley, Waller, & Brennan, 2000). The same can be said about leadership styles.

Researchers have agreed individuals are not strictly transformational or transactional (Waldman et al., 1990). However, for this study, just as attachment style, leadership style was treated as a categorical variable where individuals were placed in one of two categories (transformational or transactional) based on highest mean score of the LSRS (Dussault et al., 2013). The results of this study demonstrated there were no significant differences in IT middle-managers' perception of employees' effectiveness based on leadership style. It is quite possible that measuring leadership style in degrees versus classifying individuals into a leadership style based on highest mean score of the LSRS could have shown some variation in IT middle-managers' perception of employees' effectiveness as their score in items associated with one or the other leadership style increased or decreased. Nevertheless, as of this date there are no known

studies that support any variance in leaders' perception of employee effectiveness based on leadership style. Therefore, these findings align with existing research.

Interpretation of Findings

Although research on perception and leadership style has shown subordinates' perception of their leaders' effectiveness varies based on the leaders' leadership style (Hsu & Chen, 2011; Jayasingam & Cheng, 2009), results of the present study suggested leaders, specifically IT middle-managers, are not influenced by their leadership style in how they view their subordinates' effectiveness. Additionally, attachment theory research has suggested insecurely attached individuals are prone to perceive others more negatively than securely attached individuals (Boatwright et al., 2010). However, this study demonstrated there are no significant differences in leaders', specifically IT middle-managers, perception of employee effectiveness based on attachment style. Thus, the propensity to have a negative view of others, which is supported by attachment theory research does not appear to carry over into workplace relationships when it comes to evaluating job performance.

Based on the results of this study there is insufficient evidence to support recommending practitioners include attachment theory or leadership theory in leadership training geared towards educating leaders on employee evaluations. Nonetheless, because existing literature supports variances in perceptions in the workplace based on attachment style or leadership style, doing additional research using psychological instruments other than the ones used in this study to measure the three variables (attachment style, leadership style, and employee effectiveness) would be valuable to confirm or refute these findings.

Limitations

In quasi-experimental designs, confounding variables are one of the major threats to validity (Holgado-Tello, Chacon-Moscoso, Sanduvete-Chaves, & Perez-Gil, 2016). In this study, national or ethnic culture was a confounding variable. Research has suggested certain cultures perform better under transformational leadership while others perform better under transactional leadership (Bass & Steidelmeier, 1999; Hsu & Chen, 2011; Jung & Avolio, 1999). Another confounding variable in this study was the possibility that a low rating of an employee's effectiveness could be because the employee's effectiveness was inadequate even in the eyes of multiple raters, which could indicate IT-middle manager's leadership style or attachment style was inconsequential to how the employee was rated. There was also the possibility that given that participants could choose the employees they wanted to rate, and they were not given any criteria on which to base their selection, they could have chosen their employees based on how they were going to rate them. In other words, managers might have chosen employees because they knew they were going to rate them high or they knew they would give them a low rating.

While self-reports have their inherent limitations, the specific self-reports chosen for this study had additional limitations. Both the LSRS, used to measure leadership style, and the EAS, used to measure attachment style, were also limited in that leadership style and attachment style were categorized based on the highest mean score of associated items with no concessions regarding individuals who had equal mean scores across categories. Ideally, for the purposes of this study, the researcher was interested in categorizing individuals; however, it was not always possible to do so due to respondents having equal mean scores across categories. When respondents had equal mean scores across attachment categories or leadership categories, the data were counted as missing. To solve the issue of missing data, the researcher used MI, which

is a commonly used technique that allows parameter estimates to be unbiased as well as the estimation of missing data to be conducted in a reasonable way (Allison, 2000; Graham et al., 2007).

Implications for Practice

According to research, attachment style is part of individuals' permanent makeup (Ainsworth & Bowlby, 1991) and as such affects many aspects of individuals' lives. The aim of the present study was to add to workplace attachment literature by examining whether leaders' attachment style influenced their perception of their employees' effectiveness. The study was limited to a specific subgroup of leaders. That is, IT middle-managers. Despite, that the literature suggests attachment styles influence individuals' perception of others (Boatwright et al., 2010) and that individuals might subconsciously reference internal working models when evaluating their employees (Keller, 2003), the results of the current study demonstrated no significant differences in IT middle-managers' perception of their employees' effectiveness based on IT middle-managers' attachment style.

Results of this study did not show IT middle-managers' leadership style had a significant impact on IT middle managers' rating of employees' effectiveness. Research on leadership style and employee effectiveness has been studied from the perspective of subordinates and how they perceive their leaders' effectiveness based on the leaders' leadership style with results showing a positive relationship between leaders' leadership style and subordinates' perception of leaders' effectiveness (Hsu & Chen, 2011; Swid, 2014). It is important for organizational leaders to know neither leadership style nor attachment style are a crucial element of the employee evaluation process. It would be detrimental to employees' progress within an organization to have elements

outside of their actual performance affecting their performance rating. Therefore, it is beneficial for leaders to discover those things that might influence their perception.

Recommendations for Further Research

The present study covered a small sector of the population. In addition, it focused on a very specific group of middle-managers; that is, IT middle-managers. IT plays a vital role in the success of many organizations, more so in today's global economy. Organizations' business strategies are intertwined with IT systems, which places IT managers in a delicate position of coordinating with business managers who come from a variety of backgrounds such as health, law, banking, and so on (Kakabadse & Korac-Kakabadse, 2000). More importantly, IT middle-managers serve as liaisons between IT staff and business staff (Kakabadse & Korac-Kakabadse, 2000). Furthermore, IT middle-managers are generally the ones upper leadership look to for performance evaluations (Badawy, 2007). IT professionals are demoralized when they perceive their performance evaluations are based on personal traits rather than their accomplishments (Badawy, 2007). Therefore, continuing to research how to make IT middle-managers more effective will impact IT staff and as a result will also impact the health and productivity of organizations.

The present study qualified leadership style and attachment style as categorical variables. Further research is suggested to explore the possibility of a linear relationship between these variables and the dependent variable of perceived employee effectiveness. In addition, because the sample size for this study was small, limiting the number of participants in each category, increasing the sample size considerably could eliminate the need to use MI, could provide more reliable results and could minimize the chances of Type I and Type II errors as well as reduce the risk of bias. Furthermore, IT middle-managers are characteristically task oriented (Willcoxson &

Chatham, 2006), it is possible that when they are rating their employees' effectiveness, they are more inclined to focus on tasks completion and not the whole person. Based on the results of this study, future researchers may contribute to the leadership and attachment literature by doing a similar study within the helping professions or outside of IT. This may also assist I/O psychologists in understanding the elements that may or may not affect how employees are rated by their managers.

Conclusion

This quasi-experimental study with nonrandom assignment of participants explored two variables, attachment style and leadership style, in relation to IT middle-managers' perception of their employees' effectiveness. One of the goals of this study was to identify whether these two variables independently of each other have any bearing on IT middle-managers' rating of their employees. The researcher hypothesized significant differences existed in IT middle-managers' perception of their employees' effectiveness based on one of these variables when the other variable was held constant. In addition, it explored whether the two variables in combination with each other had any predictive value in determining the propensity of IT middle-managers' to perceive their employees as less effective.

A gap in existing attachment theory literature as well as leadership style literature was identified. Most of the literature on leader/subordinate perception based on these two constructs appeared to be one-sided with the attention placed on subordinates' perception of their leaders. While it is very important for leadership development for leaders to understand how their behaviors or attitudes affect their employees' view of their effectiveness, in the present study, the researcher argued that in addition to understanding how subordinates view them, leaders should also be self-aware of their leadership style and attachment style and how these interact with how

they perceive their employees' effectiveness because leaders could be directly responsible for their subordinates' growth within an organization.

Research on attachment theory in the workplace has provided insight to organizations. For instance, Bresnahan and Mitroff (2007) found insecurely attached individuals lack the interpersonal skills needed to lead. Wilcoxson and Chatham (2006) suggested it is common to see lead programmers step into the role of IT managers. Wilcoxson and Chatham go on to stress there is a lack of inter-personal and communication skills training for IT managers. Although existing literature has suggested attachment style affects individuals' view of others (Boatwright et al., 2010) and leaders' leadership style affect subordinates' view of their leaders, results of the present study revealed neither attachment style nor leadership style of IT middle-managers influence IT middle-managers' view of their employees' effectiveness. Nevertheless, because technology, and therefore IT staff, is such an important part of organizations in today's global economy, organizations would be well served to continue to explore elements that could influence the effectiveness of their IT departments.

REFERENCES

- Ahmad, K. Z. B. (2008). Relationship between leader-subordinate personality congruence and performance and satisfaction in the UK. *Leadership and Organizational Development Journal*, 29(5), 396-411. doi:10.1108/01437730810887012
- Ainsworth, M. S. (1985). Patterns of infant-mother attachments: Antecedents and effects on development. *Bulletin of the New York Academy of Medicine*, 61(9), 771-791. <https://www.ncbi.nlm.nih.gov.library.capella.edu/pmc/articles/PMC1911899/pdf/bullnyacadmed00065-0005.pdf>
- Ainsworth, M. S., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist*, 6(4), 331-341. doi:10.1037/0003-066X.46.4.333
- Albert, L. S., & Horowitz, L. M. (2009). Attachment styles and ethical behavior: Their relationship and significance in the marketplace. *Journal of Business Ethics*, 87(3), 299-316. doi:10.1007/s10551-008-9918-6
- Allen, T. D, Shockley, K. M., & Poteat, L. (2010). Protégé anxiety attachment and feedback in mentoring relationships. *Journal of Vocational Behavior*, 77(1), 73-80. doi:10.1016/j.jvb.2010.02.007
- Allison, P. D. (2000). Multiple imputation for missing data: A cautionary tale. *Sociological Methods & Research*, 28(3), 301-309. doi:10.1177/0049124100028003003
- Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *The Leadership Quarterly*, 14(3), 262-295. doi:10.1016/S1048-9843(03)00030-4
- Apostolopolous, N., & Liargovas, P. (2016). Regional parameters and solar energy enterprises: Purposive sampling and group AHP approach. *International Journal of Energy Sector Management*, 10(1), 19-37. doi:10.1108/IJESM-11-2014-0009
- Astbury, G. (2008). Communication. In A. Bryan, E. Mason-Whitehead & A. McIntosh (Eds.), *Key Concepts in Nursing*. London, United Kingdom: Sage.
- Aust, F., Diedenhofen, B., Ullrich, S., & Musch, J. (2013). Seriousness checks are useful to improve validity in online research. *Behavior Research Methods*, 45(2), 527-535. doi:10.3758/s13428-012-0265-2
- Avolio, B. J. (2007). Promoting more integrative strategies for leadership theory-building. *American Psychologist*, 62(1), 25-33. doi:10.1037/0003-066X.62.1.25

- Badawy, M. K. (2007). Managing human resources. *Research Technology Management*, 50(4), 56-74. doi:10.1080/08956308.2007.11657452
- Bakermans-Kranenburg, M. J., van IJzendoorn, M. H., & Kroonenberg, P. M. (2004). Differences in attachment security between African-American and White children: Ethnicity or socio-economic status? *Infant Behavior and Development*, 27(3), 417-433. doi:10.1016/j.infbeh.2004.02.002
- Barratt, M. J., Ferris, J. A., & Lenton, S. (2015). Hidden populations, online purposive sampling, and external validity: Taking off the blindfold. *Field Methods*, 27(1), 3-21. doi:10.1177/1525822X14526838
- Basham, L. M. (2012). Transformational and transactional leaders in higher education. *S. A. M. Advanced Management Journal*, 77(2), 15-23. <https://search-proquest-com.library.capella.edu/docview/1027234874/fulltextPDF/678FBE78E21C4612PQ/1?>
- Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3), 19-31. doi:10.1016/0090-2616(90)90061-S
- Bass, B. M., & Avolio, B. J. (1993). Transformational leadership and organizational culture. *Public Administration Quarterly*, 17(1), 112-121. <http://www.jstor.org/stable/40862298>
- Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *The Leadership Quarterly*, 10(2), 181-217. doi:10.1016/S1048-9843(99)00016-8
- Bass, B. M., Avolio, B. J., & Goodheim, L. (1987). Biography and the assessment of transformational leadership at the world-class level. *Journal of Management*, 13(1), 7-19. doi:10.1177/014920638701300102
- Bennett, T. M. (2009). A study of the management leadership style preferred by subordinates. *Journal of Organizational Culture, Communications and Conflict*, 13(2), 1-25. <https://search-proquest-com.library.capella.edu/docview/216598712/fulltextPDF/B302AE5D797046E6PQ/1?>
- Berson, Y., Dan, O., & Yammarino, F. J. (2006). Attachment style and individual differences in leadership perceptions and emergence. *The Journal of Social Psychology*, 146(2), 165-182. <http://dx.doi.org.library.capella.edu/10.3200/SOCP.146.2.165-182>
- Beynon-Davies, P. (2009). Formated technology and informed action: The nature of information technology. *International Journal of Information Management*, 29(4), 272-282. doi:10.1016/j.ijinfomgt.2008.12.001

- Blatt, S. J., & Levy, K. N. (2003). Attachment theory, psychoanalysis, personality development, and psychopathology. *Psychoanalytical Inquiry*, 23(1), 541-575.
doi:10.1080/07351692309349028
- Boatwright, K. J., Lopez, F. G., Sauer, E. M., VanDerWege, A., & Huber, D. M. (2010). The influence of adult attachment styles on workers' preferences for relational leadership behaviors. *The Psychologist-Manager Journal*, 13(1), 1-14.
doi:10.1080/10887150903316271
- Bolen, R. (2000). Validity of attachment theory. *Trauma, Violence and Abuse*, 1(2), 128-141.
doi:10.1177/1524838000001002002
- Bond, T., & Fox, C. M. (2015). Applying the Rasch Model: Fundamental measurements in the human sciences. Florence: Taylor and Francis.
- Bono, J. E., Foldes, H. J., Vinson, G., & Muros, J. P. (2007). Workplace emotions: The role of supervision and leadership. *Journal of Applied Psychology*, 92(5), 1357-1367.
doi:10.1037/0021-9010.92.5.1357
- Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry*, 52(4), 664-678. doi:0002-9432/82/040664-15\$00.75
- Bowlby, J. (1988). A secure base: Parent-child attachment and healthy human development. London: Basic Books
- Brandon, D. M., Long, J. H., Loraas, T. M., Mueller-Phillips, J., & Vansant, B. (2014). *Behavioral Research in Accounting*, 26(1), 1-23. doi:10.2308/bria-50651
- Bresnahan, C. G., & Mitroff, I. I. (2007). Leadership and attachment theory. *American Psychologist*, 62(6), 607-608. doi:10.1037/0003-066X62.6.607
- Chen, Z., Lam, W., & Zhong, J. A. (2012). Effects of perception on LMX and work performance: Effects of supervisors' perception of subordinates' emotional intelligence and subordinates' perception of trust in the supervisor on LMX and, consequently, performance. *Asia Pacific Journal of Management*, 29(3), 597-616. doi:10.1007/s10490-010-9210-z
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58(4), 644-663.
doi:0022-3514/90/S00.75
- Dahling, J. J., & Librizzi, U. A. (2015). Integrating the theory of work adjustment and attachment theory to predict job turnover intentions. *Journal of Career Development*, 42(3), 215-228. doi:10.1177/0894845314545169

- Davidovitz, R., Mikulincer, M., Shaver, P. R., Izsak, R., & Popper, M. (2007). Leaders as attachment figures: Leaders' attachment orientations predict leader-related mental representations and followers' performance and mental health. *Journal of Personality and Social Psychology*, 93(4), 632-650. doi:10.1037/0022-3514.93.4.632
- Desivilya, H. S., Sabag, Y., & Aston, E. (2006). Prosocial tendencies in organizations: The role of attachment styles and organizational justice in shaping organizational citizenship behavior. *International Journal of Organizational Analysis*, 14(1), 22-42. doi:10.1108/10553180610739731
- Dewitte, M., & DeHouwer, J. (2011). Attachment-style differences in the appraisal of the attachment figure. *European Journal of Personality*, 25(3), 173-183. doi:10.1002/per.773
- Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C., & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, 25(1), 36-62. doi:10.1016/j.leaqua.2013.11.005
- Du Plessis, T., & Van Niekerk, A. (2017). Factors influencing managers' attitudes towards performance appraisal. *Sa Journal of Human Resource Management*, 15, 1-10. doi:10.4102/sajhrm.v15i0.880
- Dussault, M., Frenette, E., & Fernet, C. (2013). Leadership: Validation of a self-report scale. *Psychological Reports*, 112(2), 419-436. doi:10.2466/01.08.PRO.112.2.419-436
- Effelsberg, D. Solga, M., & Gurt, J. (2014). Getting followers to transcend their self-interest for the benefit of their company: Testing a core assumption of transformational leadership theory. *Journal of Business Psychology*, 29(1), 131-143. doi:10.1007/s10869-013-9305-x
- Ein-Dor, T., Mikulincer, M., Doron, G., & Shaver, P. R. (2010). The attachment paradox: How can so many of us (the insecure ones) have no adaptive advantages? *Association for Psychology Science*, 5(2), 123-141. doi:10.1177/1745691610362349
- Ein-Dor, T., Reizer, A., Shaver, P. R., & Dotan, E. (2012). Standoffish perhaps, but successful as well: Evidence that avoidant attachment can be beneficial in professional tennis and computer science. *Journal of Personality*, 80(3), 749-768. doi:10.1111/j.1467-6494.2011.00747.x
- Ekaterini, G. (2011). A qualitative approach to middle managers' competences. *Management Research Review*, 34(5), 553-575. doi:10.1108/01409171111128724
- Engelbert, B., & Wallgren, L. G. (2016). The origins of task and people oriented leadership styles: Remains from early attachment security and influences during childhood and adolescence. *SAGE Open*, 6 (2), 1-19. doi:10.1177/2158244016649012

- Farrokhyar, F., Reddy, D., Poolman, R. W., & Bhandari, M. (2013). Why perform a priori sample size calculation? *Canadian Journal of Surgery*, 56(3), 207-213. doi:10.1503/cjs.018012
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149-1160. doi:10.3758/BRM.41.4.1149
- Fraley, R. C. (2012). Information on the Experiences in Close Relationships-Revised (ECR-R) Adult Attachment Questionnaire. <http://internal.psychology.illinois.edu/~rcfraley/measures/ecrr.htm>
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item-response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, 78(2), 350-365. doi:10.1037//0022-3514.78.2.350
- Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The experiences in close relationships – Relationship Structures Questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, 23(3), 615-625. doi:10.1037/a0022898
- Fraser, D. (2007). Give me the child and I'll give you the leader: what can attachment theory teach us about leadership? *International Journal of Leadership in Public Services*, 3(3), 42-48. doi:10.1108/17479886200700020
- Game, A. M. (2008). Negative emotions in supervisory relationships: The role of relational models. *Human Relations*, 61(3), 355-393. doi:10.1177/0018726708088998
- Geller, D. & Bamberger, P. (2009). Bringing avoidance and anxiety to the job: Attachment style and instrumental helping behavior among co-workers. *Human Relations*, 62(12), 1803-1827. doi:10.1177/0018726709337524
- Germain, M. (2011a). Employee Assessment Scale. *PsycTests*, doi:10.1037/t06739-000
- Germain, M. (2011b). Formal mentoring relationships and attachment theory: Implications for human resource development. *Human Resources Development Review*, 10(2), 123-150. doi:10.1177/1534484310397019
- Giltinane, C. L. (2013). Leadership styles and theories. *Nursing Standard*, 27(41), 35-39. <https://search-proquest-com.library.capella.edu/docview/1368907593?>
- Graham, J. W., Olchowski, A. E., & Gilreath, T. D. (2007). How many imputations are really needed? Some practical implications of Multiple Imputation theory. *Prevention Science*, 8(3), 206-213. doi:10.1007/s11121-007-0070-9

- Griffin, D., & Bartholomew, K. (1994). Models of the self and others: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology*, 67(3), 430-445. doi:0022-3514/94/S3.00
- Hammond, F., Malec, J., Nick, T., & Buschbacher, R. (2014). Handbook for Clinical Research. New York: Demos Medical Publishing.
- Hansbrough, Y. K. (2012). The construction of a transformational leader: Follower attachment and leadership perceptions. *Journal of Applied Social Psychology*, 42(6), 1533-1549. doi:10.1111/j.1559-1816.2012.00913.x
- Harding, H., Lee, H., & Ford, J. (2014). Who is the middle manager? *Human Relations*, 67(10), 1213-1237. doi:10.1177/0018726713516654
- Harms, P.D. (2011). Adult attachment styles in the workplace. *Human Resource Management Review*, 21(4), 285-296. doi:10.1016/j.hrmr.2010.10.006
- Harms, P. D., Bai, Y., & Hans, G. H. (2016). How leader and follower attachment styles are mediated by trust. *Human Relations*, 69(9), 1853-1876. doi:10.1177/0018726716628968
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52(3), 511-524. doi:10.1037/0022-3514.52.3.511
- Hazan, C., & Shaver, P. (1990). Love and work: An attachment-theoretical perspective. *Journal of Personality and Social Psychology*, 59(2), 270-280. doi:10.1037/0022-3514.59.2.270
- Hernandez, M., Eberly, M. B., Avolio, B. J., & Johnson, M. D. (2011). The loci and mechanisms of leadership: Exploring a more comprehensive view of leadership. *The Leadership Quarterly*, 22(6), 1165-1185. doi:10.1016/j.leaqua.2011.09.009
- Hochberg, J. (1956). Perception: Toward the recovery of a definition. *Psychological Review*, 63(6), 400-405. doi:10.1037/h0046193
- Holgado-Tello, F. P., Chacon-Moscoso, S., Sanduvete-Chaves, S., & Perez-Gil, J. A. (2016). A simulation study of threats to validity in quasi-experimental designs: Interrelationship between design, measurement, and analysis. *Frontiers in Psychology*, 7(2016), 897-905. doi:10.3389/fpsyg.2016.00897
- Howard, G. S. (1990). On the construct validity of self-reports: What do the data say? *American Psychologist*, 45(2), 292-294. doi:10.1037/0003-066X.45.2.292
- Hsu, C., & Chen, W. (2011). Subordinates' perception of managers' transformational leadership style and satisfaction: A comparison of electronic manufacturing companies in Mainland China and Taiwan. *International Journal of Human Resource Management*, 22(15), 3097-3108. doi:10.1080/09585192.2011.560872

- Jayasingam, S., & Cheng, M. Y. (2009). Leadership style and perception of effectiveness: Enlightening Malaysian managers. *Asian Social Science*, 5(2), 54-60. doi:10.5539/ass.v5n2p54
- Jogulu, U. D. (2010). Culturally-linked leadership styles. *Leadership and Organizational Development Journal*, 31(8), 705-719. doi:10.1108/01437731011094766
- Jung, D. I., & Avolio, B. J. (1999). Effects of leadership style and followers' cultural orientation on performance in group and individual task conditions. *Academy of Management Journal*, 42(2), 208-217. doi:10.2307/257093
- Kafetsios, K., Athanasiadou, M., & Dimou, N. (2014). Leaders' and subordinates' attachment orientation, emotion regulation capabilities and affect at work: A multilevel analysis. *The Leadership Quarterly*, 25(3), 512-527. doi:10.1016/j.leaqua.2013.11.010
- Kakabadse, A., & Korac-Kakabadse, N. (2000). Future role of IS/IT professionals. *The Journal of Management Development*, 19(2), 97-154. <https://search-proquest-com.library.capella.edu/docview/216351380/fulltextPDF/8E58CDF73D714ADDPQ/1?>
- Kang, H. (2013). The prevention and handling of missing data. *Korean Journal of Anesthesiology*, 64(5), 402-406. doi:10.4097/kjae.2013.64.5.402
- Kanungo, R. N. (2001). Ethical values of transactional and transformational leaders. *Canadian Journal of Administrative Science*, 18(4), 257-265. doi:10.1111/j.1936-4490.2001.tb00261.x
- Keller, T. (2003). Parental images as a guide to leadership sense making: An attachment perspective on implicit leadership theories. *The Leadership Quarterly*, 14(2), 141-160. doi:10.1016/S1048-9843(03)00007-9
- Keller, T., & Cacioppe, R. (2001). Leader-follower attachments: Understanding parental images at work. *Leadership & Organization Development Journal*, 22(2), 70-75. doi:10.1108/01437730110382622
- Kenward, M. G., & Carpenter, J. (2007). Multiple imputation: Current perspective. *Statistical Methods in Medical Research*, 16(3), 199-218. doi:10.1177/0962280206075304
- Keren, E., & Mayseless, O. (2013). The freedom to choose secure attachment relationships in adulthood. *The Journal of Genetic Psychology*, 174(3), 271-290. doi:10.1080/0221325.2012.681326
- Khan, W. A., & Kram, K. (1994). Authority at work: Internal models and their organizational consequences. *Academy of Management Review*, 9(1), 17-50. doi:10.5465/AMR.1994.9410122007

- Krausert, A. (2014). HRM systems for knowledge workers: Difference among top managers, middle managers, and professional employees. *Human Resource Management, 53*(1), 67-87. doi:10.1002/hrm.21554
- Kuhnert, K. W., & Lewis, P. (1987). Transactional and transformational leadership: A Constructive/Developmental analysis. *The Academy of Management Review, 12*(4), 648-657. doi:10.5465/AMR.1987.4306717
- Lanciano, T., & Zammuner, V. L. (2014). Individual differences in work-related well-being: The role of attachment style. *Europe's Journal of Psychology, 10*(4), 694-711. doi:10.5964/ejop.v10i4.814
- Landis, E. A., Hill, D., & Harvey, M. R. (2014). A synthesis of leadership theories and styles. *Journal of Management Policy and Practice, 15*(2), 97-100. <https://search-proquest-com.library.capella.edu/docview/1535935047?>
- Lavy, S., Barely, Y., & Ein-Dor, T. (2015). The effects of attachment heterogeneity and team cohesion on team functioning. *Small Group Research, 46*(1), 27-49. doi:10.1177/1046496414553854
- Ledesma, R. D., & Valero-Mora, P. (2007). Determining the number of factors to retain in EFA: An easy to use computer program for carrying out parallel analysis. *Practical Assessment, Research and Evaluation, 12*(2), 1-11. <https://doaj.org/article/6120454dc23b45fb9e438b15e7fbc79d>
- Lester, D. L., & Parnell, J. A. (2006). The desktop manager. *S.A.M. Advanced Management Journal, 71*(4), 43-49. <https://search-proquest-com.library.capella.edu/docview/231148032?>
- Lester, D. L., Parnell, J. A., & Carraher, S. (2010). Assessing the desktop manager. *The Journal of Management Development, 29*(3), 246-264. doi:10.1108/02621711011025777
- Leung, S. (2011). A comparison of psychometric properties and normality in 4-, 5-, 6-, and 11-point Likert scales. *Journal of Social Service Research, 37*(4), 412-421. doi:10.1080/01488376.2011.580697
- Levy, K. N. (2005). The implications of attachment theory and research for understanding borderline personality disorder. *Development and Psychopathology, 17*(4), 959-86. doi:10.1017/s0954579405050455
- Levy, K. N., & Blatt, S. (1999). Attachment theory and psychoanalysis: Further differentiation within insecure attachment patterns. *Psychoanalytic Inquiry, 19*(1), 541-575. doi:10.1080/07351699909534266

- Li, C., & Hung, C. (2009). The influence of transformational leadership on workplace relationships and job performance. *Social Behavior and Personality*, 37(8), 1129-1142. doi:10.2224/sbp.2009.37.8.1129
- Little, L. M., Nelson, D. L., Wallace, J.C., & Johnson, P. D. (2011). Integrating attachment style, vigor at work, and extra-role performance. *Journal of Organizational Behavior*, 32(3), 464-483. doi:10.1002/job.709
- Littman-Ovadia, H., Oren, L., & Lavy, S. (2013). Attachment and autonomy in the workplace: New insights. *Journal of Career Assessment*, 21(4), 502-518. doi:10.1177/1069072712475282
- Longenecker, C. O., & Gioia, D.A. (2001). Confronting the “politics” in performance appraisal. *Business Forum*, 25(3), 17-23. <https://search-proquest-com.library.capella.edu/docview/210202183?>
- Lopez, F. G., & Ramos, K. (2016). Predicting well-being in managers: Test of a positive psychology model. *Journal of Positive Psychology*, 11(4), 378-387. doi:10.1080/17439760.2015.1092571
- Lynch, P. D., Eisenberger, R., & Armeli, S. (1999). Employee Performance Questionnaire. *Psychtests*, doi:10.1037/t09115-000
- Macaux, W. P. (2014). Coaching the faltering executive. *Organizational and Social Dynamics*, 14(2), 264-284. <https://search-proquest-com.library.capella.edu/docview/1629022294?>
- Manly, C. A., & Wells, R. S. (2015). Reporting the use of multiple imputation for missing data in higher education research. *Research in Higher Education*, 56(4), 397-409. doi:10.1007/s11162-014-9344-9
- Manning, M. (2003). Leadership across cultures: Attachment style influences. *Journal of Leadership and Organizational Studies*, 9(3), 20-30. doi:10.1177/107179190300900304
- Markin, R. D., & Marmarosh, C. (2010). Application of adult attachment theory to group member transference and the group therapy process. *Psychotherapy: Theory, Research, Practice, Training*, 47(1), 111-121. doi:10.1037/a0018840
- Mayr, S., Erdfelder, E., Buchner, A., & Faul, F. (2007). A short tutorial of G*Power. *Tutorials in Quantitative Methods of Psychology*, 3(2), 51-59. <https://doaj.org/article/41fee79595b44790a07cac8d9be92e76>
- Mayselless, O. (2010). Attachment and the leader-follower relationship. *Journal of Social and Personal Relationships*, 27(2), 271-280. doi:10.1177/0265407509360904

- Mayseless, O., & Popper, M. (2007). Reliance on leaders and social institutions: An attachment perspective. *Attachment and Human Development, 9*(1), 73-93. doi:10.1080/14616730601151466
- McEntire, L., & Greene-Shorridge, T. (2011). Recruiting and selecting leaders for innovation: How to find the right leader. *Advances in Developing Human Resources, 13*(3), 266-278. doi: 10.1177/1523422311424712
- McNeely, B. L., & Meglino, B. M. (1994). The role of dispositional and situational antecedents in prosocial organizational behavior: An examination of the intended beneficiaries of prosocial behavior. *Journal of Applied Psychology, 79*(6), 836-844. doi:10.1037/0021-9010.79.6.836
- Meredith, P., Poulsen, A., Khan, A., Henderson, J., & Castrisio, V. (2011). The relationship between adult attachment styles and work-related self-perceptions for Australian, pediatric occupational therapists. *British Journal of Occupational Therapy, 74*(4), 160-167. doi:10.4276/030802211X13021048723138
- Messick, S. (1995). Validity of psychological assessment: Validations from inferences from persons' responses and performance as scientific inquiry into score meaning. *American Psychologist, 50*(9), 741-749. doi:10.1037/0003-0066x.50.9.741
- Mikelson, K. D., Kessler, R. C., & Shaver, P. R. (1997). Adult attachment in a nationally representative sample. *Journal of Personality and Social Psychology, 73*(5), 1092-1106. doi:0022-3514/97/S3.00
- Mikulincer, M., & Horesh, N. (1999). Adult attachment style and the perception of others: The role of projective mechanisms. *Journal of Personality and Social Psychology, 76*(6), 1022-1034. doi:10.1037/0022-3514.76.6.1022
- Milyavskaya, M., & Lydon, J. E. (2012). Strong but insecure: Examining the prevalence and correlates of insecure attachment bonds with attachment figures. *Journal of Social and Personal Relationships, 30*(5), 529-544. doi:10.1177/0265407512461200
- Molero, F., Moriano, J. A., & Shaver, P. R. (2013). The influence of attachment style to subordinates' attachment to the leader. *Spanish Journal of Psychology, 16*(2), 1-10. doi:10.1017/sjp.2013.67
- Montero, I., & Leon, O. G. (2007). A guide for naming research studies in psychology. *International Journal of Clinical and Health Psychology, 7*(3), 847-862. <https://doaj.org/article/996696eefbfa4f53934c9ba97d273382>
- Moorman, R. H., & Blakely, G. L. (1995). Individualism-collectivism as an individual difference predictor of organizational citizenship behavior. *Journal of Organizational Behavior, 16*(2), 127-142. doi:10.1002/job.4030160204

- Nelson, D. L., & Quick, J. C. (1991). Social support and newcomer adjustment in organizations: Attachment theory at work? *Journal of Organizational Behavior*, 12(6), 543-554. doi:10.1002/job.4030120607
- O'Connor, G., & Smallman, C. (1995). The hybrid manager: A review. *Management Decision*, 33(7), 19-28. <https://search-proquest-com.library.capella.edu/docview/212101309?>
- Oliver, P. H., Gottfried, A. W., Guerin, D. W., Gottfried, A. E., Reichard, R. J., & Riggio, R. E. (2011). Adolescent family environmental antecedents to transformational leadership potential: A longitudinal mediational analysis. *The Leadership Quarterly*, 22(3), 55-544. doi:10.1016/j.leaqua.2011.04.010
- Ozbilir, T., Day, A., & Catano, V. M. (2015). Perfectionism at work: An investigation of adaptive and maladaptive perfectionism in the workplace among Canadian and Turkish employees. *International Association of Applied Psychology*, 64(1), 252-280. doi:10.1111/apps.12032
- Popper, M., & Amit, K. (2009). Attachment and leader's development via experiences. *The Leadership Quarterly*, 20(5), 749-763. doi:10.1016/j.leaqua.2009.06.005
- Popper, M., & Maysless, O. (2003). Back to basics: Applying a parenting perspective to transformational leadership. *The Leadership Quarterly*, 14(1), 41-65. doi:10.1016/S1048-9843(02)00183
- Popper, M., & Maysless, O. (2007). The building blocks of leader development: A psychological conceptual framework. *Leadership and Organizational Development Journal*, 28(7), 664-684. doi:10.1108/01437730710823905
- Popper, M., Maysless, O., & Castelnovo, O. (2000). Transformational leadership and attachment. *The Leadership Quarterly*, 11(2), 267-289. doi:10.1016/S1048-9843(00)00038-2
- Poteat, L. F., Shockley, K. M., & Allen, T. D. (2015). Attachment anxiety in mentoring: The role of commitment. *Career Development International*, 20(2), 119-129. doi:10.1108/CDI-12-2014-0157
- Rada, D. R. (1999). Transformational leadership and urban renewal. *Journal of Leadership Studies*, 6(3/4), 18-33. doi:10.1177/107179199900600302
- Rafferty, A. E., & Griffin, M. A. (2004). Dimensions of transformational leadership: Conceptual and empirical extensions. *Leadership Quarterly*, 15(3), 329-354. doi:10.1016/j.leaqua.2004.02.009

- Ravitz, P., Muander, R., Sthankiya, B., & Lancee, W. (2009). Adult attachment measures: A 25-year review. *Journal of Psychosomatic Research*, 69(4), 419-432. doi:10.1016/j.psychores.2009.08.006
- Reich, B. H., & Benbasat, I. (2000). Factors that influence the social dimensions of alignment between business and information technology objectives. *MIS Quarterly*, 24(1), 81-113.
- Richards, D. A., & Hackett, R. D. (2012). Attachment and emotional regulation: Compensatory interactions and leader-member exchange. *The Leadership Quarterly*, 23(4), 686-701. doi:10.1016/j.leaqua.2012.03.005
- Richards, D. A., & Schat, A. H. (2011). Attachment at (not to) work: Applying attachment theory to explain individual behavior in organizations. *Journal of Applied Psychology*, 96(1), 169-182. doi:10.1037/a0020372
- Rosete, D., & Ciarrochi, J. (2005). Emotional intelligence and its relationship to workplace performance outcomes of leadership effectiveness. *Leadership & Organization Development Journal*, 26(5), 388-399. doi:10.1108/01437730510607871
- Rubin, D. B. (1976). Inference and missing data. *Biometrika*, 63(3), 581-592. <https://doi.org/10.1093/biomet/63.3.581>
- Russell, J. E. (2004). Mentoring. In C. Spielberger (Ed.), *Encyclopedia of Applied Psychology*. Oxford, United Kingdom: Elsevier Science & Technology.
- Sable, P. (2008). What is adult attachment? *Clinical Social Work Journal*, 36(1), 21-30. doi:10.1007/s10615-007-0110-8
- Schafer, J. L., & Graham, J. W. (2022). Missing data: Our view of the state of the art. *Psychological Methods*, 7(2), 147-177. doi:10.1037//1082-989X.7.2.147
- Schmitt, T. A. (2011). Current methodological considerations in exploratory and confirmatory factor analysis. *Journal of Psychoeducational Assessment*, 29(4), 304-321. doi:10.1177/0734282911406653
- Schusterschitz, C., Geser, W., Nohammer, E., & Stummer, H. (2011). Securely attached, strongly committed? On the influence of attachment orientations on organizational commitment. *Zeitschrift für Personalforschung*, 25(4), 335-355. doi:10.1688/1862-0000_ZfP_2011_04_Schusterschitz
- Sciarappa, K. (2010). Mentor connections. *Principal*, 90(1), 36-40. <https://eric.ed.gov/?id=EJ917573>
- Sethuraman, K., & Suresh, J. (2014). Effective leadership styles. *International Business Research*, 7(9), 165-172. doi:10.5539/ibr.v7n9p165

- Setia, M. S. (2016). Methodology series module 5: Sampling strategies. *Indian Journal of Dermatology*, 61(5), 505-509. doi:10.4103/0019-5154.190118
- Sigalit, R. & Mikulincer, M. (2009). Attachment orientation and job burnout: The mediating roles of team cohesiveness and organizational fairness. *Journal of Social and Personal Relationships*, 26(4), 549-563. doi:10.1177/0265407509347930
- Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, 68(4), 653-663. doi:10.1037/0021-9010.68.4.653
- Swid, A. (2014). Police members' perception of their leaders' leadership style and its implications. *Policing*, 37(3), 579. doi:10.1108/PIJPSM-08-2013-0085
- Timmerman, I. G. H., & Emmelkamp, P. M. G. (2006). The relationship between attachment styles and cluster B personality disorders in prisoners and forensic inpatients. *International Journal of Law and Psychiatry*, 29(1), 48-56. doi:10.1016/j.iljp.2005.04.005
- Tourish, D. (2014). Leadership, more or less: A processual, communication perspective on the role of agency in leadership theory. *Leadership*, 10(1), 79-9. doi:10.1177/1742715013509030
- Towler, A. (2005). Charismatic leadership development: Role of parental attachment style and parental psychological control. *Journal of Leadership and Organizational Studies*, 11(4), 15-25. doi:10.1177/107179190501100402
- Tripepi, G., Jager, K. J., Dekker, F. W., & Zoccali, C. (2010). Selection bias and information bias in clinical research. *Nephron*, 115(2), 94-99. doi:10.1159/000312871
- Tziner, A., & Tanami, M. (2013). Examining the links between attachment, perfectionism, and job motivation potential with job engagement and workaholism. *Journal of Work and Organizational Psychology*, 29(2), 65-74. doi:10.5093/tr2013a10
- Uhl-Bien, M., Marion, R., & McKelvey, B. (2007). Complexity leadership theory: Shifting leadership from the industrial age to the knowledge era. *The Leadership Quarterly*, 18(4), 298-318. doi: 10.1016/j.leaqua.2007.04.002
- U. S. Department of Commerce Economics and Statistics Administration Census Bureau (2016). Occupations in information technology: American community survey reports. Retrieved from <https://www.census.gov/content/dam/Census/library/publications/2016/acs/acs-35.pdf>
- U.S. Department of Health & Human Services (1978). The Belmont report: Ethical principles and guidelines for the protection of human subjects of research. Retrieved from <http://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/>

- Van Dyne, L., Graham, J. W., & Dienesch, R. M. (1994). Organizational citizenship behavior: Construct redefinition, measurement, and validation. *Academy of Management Journal*, 37(4), 765-802. doi:10.2307/256600
- Vrtička, P., Sander, D., & Vuilleumier, P. (2012). Influence of adult attachment style on the perception of social and non-social emotional scenes. *Journal of Social and Personal Relationships*, 29(4), 530-544. doi:10.1177/0265407512443451
- Wachtel, P. A. (2010). One-person and two-person conceptions of attachment and their implications for psychoanalytical thought. *International Journal of Psychoanalysis*, 91(3), 561-581. doi:10.1111/j.1745-8315.2010.00265.x
- Waldman, D. A., Bass, B. M., & Yammarino, F. J. (1990). Adding to contingent-reward behavior: The augmenting effect of charismatic leadership. *Group and Organization Studies*, 15(4), 381-392. doi:10.1177/105960119001500404
- Wang, S., Noe, R. A., Wang, Z., & Greenberger, D. B. (2009). What affects willingness to mentor in the future? An investigation of attachment styles and mentoring experiences. *Journal of Vocational Behavior*, 74(3), 245-256. doi:10.1016/j.jvb.2008.12.002
- Warner, R.M. (2013). Applied statistics: From bivariate through multivariate techniques. Thousand Oaks, CA: Sage Publications.
- Weiss, R. S. (1994). Is the attachment system of adults a development of Bowlby's attachment system of childhood? *Psychological Inquiry*, 5(1), 65-67. doi:10.1207/s15327965pli0501_14
- Weizmann, F. (2001). Edward John Mostyn Bowlby (1907-1990). *Psychologist*, 14(9), 465. <https://search-proquest-com.library.capella.edu/docview/211829376?>
- Willcoxson, L., & Chatham, R. (2006). Testing the accuracy of the IT stereotype: Profiling IT managers' personality and behavioral characteristics. *Information and Management*, 43(6), 697-705. doi:10.1016/j.im.2004.04.009
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17(3), 601-617. doi:10.1177/014920639101700305
- Wofford, J.C., & Goodwin, V. L. (1994). A cognitive interpretation of transactional and transformational leadership theories. *The Leadership Quarterly*, 5(2), 161-186. doi:10.1016/1048-9843(94)90026-4

STATEMENT OF ORIGINAL WORK

Academic Honesty Policy

Capella University's Academic Honesty Policy ([3.01.01](#)) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

Established in the Policy are the expectations for original work, rationale for the policy, definition of terms that pertain to academic honesty and original work, and disciplinary consequences of academic dishonesty. Also stated in the Policy is the expectation that learners will follow APA rules for citing another person's ideas or works.

The following standards for original work and definition of *plagiarism* are discussed in the Policy:

Learners are expected to be the sole authors of their work and to acknowledge the authorship of others' work through proper citation and reference. Use of another person's ideas, including another learner's, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct. (p. 1)

Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else's ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium. (p. 2)

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Research misconduct includes but is not limited to falsification, fabrication, plagiarism, misappropriation, or other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reviewing research, or in reporting research results. (p. 1)

Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.

Statement of Original Work and Signature

I have read, understood, and abided by Capella University's Academic Honesty Policy ([3.01.01](#)) and Research Misconduct Policy ([3.03.06](#)), including Policy Statements, Rationale, and Definitions.

I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the APA *Publication Manual*.

Learner name
and date Myrna Cuevas 08/23,2017