THE RELATIONSHIPS AMONG ADULT ATTACHMENT, GENERAL SELF-DISCLOSURE, AND PERCEIVED ORGANIZATIONAL TRUST

Samuel H. Adams

Albert Wiswell, Chair
Gabriella Belli
Harold Kurstedt
Karen Rosen
Clyde Croswell

February 2004
Falls Church, Virginia

Key Words: Organizational Trust, Adult Attachment, Self-Disclosure

THE RELATIONSHIPS AMONG ADULT ATTACHMENT, GENERAL SELF-DISCLOSURE, AND PERCEIVED ORGANIZATIONAL TRUST

Samuel H. Adams

Committee Chairperson: Albert K Wiswell,
Human Development

Organizations often take trust for granted or ignore it, although trust is important for organizational learning and performance. Organizations must continuously learn if they are to survive, and trust facilitates individual and organizational learning. However, many authors either mention the importance of trust, or assume trust is present, and then discuss other topics as if little can be done to better understand the antecedents of trust or to improve trust in an organization. In particular, prior to this study, researchers had not explored the influence of adult attachment and disclosiveness on organizational trust.

Human resources development professionals can play a vital role by helping leaders in their organizations attain strategic goals, however, no research study done previously has focused on how trust in an organization is influenced by adult attachment and disclosiveness. There is a need to better understand organizational trust because in today's global economy, an organization's ability to survive may depend in part on individual and organizational learning facilitated by trust.

This study focused on a main research question "What portion of the variance in employees' perceptions of organizational trust do employees' adult attachment and disclosiveness explain?" During this research, a revised instrument for measuring organizational trust was developed. The findings of this study showed that disclosiveness did not have a statistically significant influence on organizational trust. In contrast, fearful attachment, in particular was shown to have a modest, statistically significant, and negative influence on organizational trust.

ACKNOWLEDGEMENTS

I am deeply indebted to the members of the committee who gave me the gifts of their time, insight, and professional support throughout the dissertation process. I have benefited enormously from their professional expertise and keen intellects in the classroom as well as during the journey. Each member of the committee challenged my thinking and writing and shaped the substance of this dissertation. Any errors that appear in this document are solely my responsibility.

I would like to extend special thanks to Dr. Wiswell who guided me throughout the process, always giving generously of his time, insights, and suggestions for improvements to the research study. Dr. Belli very patiently taught me how to think critically as a researcher and provided penetrating and insightful critique and suggestions for improving the dissertation as well as wonderful support that gave me hope to move forward in the journey.

I was most fortunate to have wonderfully capable and supportive colleagues in the Virginia Tech Adult Learning Program. I learned a great deal from my colleagues and their support throughout the program sustained me. My friend and former colleague, Audrey Urbanczyk, provided expert editorial suggestions throughout the dissertation process.

I wish to honor my late father, Dr. Leonard P. Adams, Professor Emeritus of Cornell University, who was the bulwark of our family and who with my late mother, Evelyn H. Adams, gave me the love that sustains life.

Finally, I am profoundly thankful for the support of my wife, Marlene, who tolerated my many hours of studying and who continues as my soul mate in this lifelong journey. I could not have traveled this road without her at my side.

TABLE OF CONTENTS

APPENDICES

CHAPTER 1
INTRODUCTION

Trust is important for organizational learning and performance (Kurstedt, 2002; Zand, 1972), but it is often taken for granted, misunderstood, or ignored by organizations, even though organizations have generally declined in their perceived level of trustworthiness (Tyler & Kramer, 1996). Trust facilitates individual and organizational learning, and Senge (1990) emphasized that organizations must continuously learn in order to survive. Even though trust is frequently viewed as a key ingredient for successful organizational function, many authors in the management literature merely mention the importance of trust, or assume trust is present, and then move on to discuss other topics. These authors leave the reader with the impression that little can be done to more fully understand the origins of organizational trust or to influence the levels of trust among individuals within an organization (Gilley & Maycunich, 1998; Mayer, Davis, & Schoorman, 1995).

For example, some authors assume that trust is present, although they acknowledge that it is an important part of acquiring and sharing knowledge so that organizations can continuously learn, effectively compete, and survive in a highly competitive marketplace (Drucker, 1988, 1999). However, Drucker does not delve into the true source of organizational trust. A shortcoming in the literature is that researchers have failed to explore the origins of organizational trust by examining adult attachment and the propensity to trust that individuals bring to the workplace. This propensity to trust is rooted in the trust relationship developed between the child and the primary caregiver (usually the mother) (Ainsworth, 1989; Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969, 1988; Collins & Read, 1990; Hinde, 1982; Klohnen & Bera, 1998). Initial childhood attachment modified by subsequent life experiences has been shown to have substantial influence on intimate relationships between adults, as reported by Bartholomew (1990), Hazan and Shaver (1987), Johnson and Greenberg (1995), and other researchers. Unfortunately, the connection between adult attachment and trust in

organizations has been almost totally ignored in the management literature, even though attachment has been shown to be of pivotal importance for adult relationships outside organizations. Based on the body of research on families, it seems reasonable to inquire whether attachment also may have substantial influence on relationships in the workplace.

The research conducted to date has predominantly focused on relationships outside the workplace but has left largely unexamined the ability of individuals to form friendships in the workplace. The formation of workplace friendships is facilitated by emotional self-disclosure (ESD) in dyadic relationships. The exchange of emotional information in these relationships is often reciprocal in nature (Chelune, 1979; Petronio, 2000; Pistole, 1993; Wheeless & Grotz, 1977). ESD may influence teamwork within organizations and the development of organizational trust. Researchers have largely overlooked ESD in the workplace, its possible connections to adult attachment, and the possible influence of these two constructs on organizational trust.

Developing a better understanding of the antecedents and facilitators of organizational trust such as adult attachment and ESD may provide key insights for better understanding trust in organizations. Unraveling these relationships may ultimately help leaders of organizations to achieve organizational benefits by elevating overall levels of trust in their organizations. For example, consultants such as Shaw (1997) see an organizational payoff resulting from interventions to elevate the levels of trust (Reina & Reina, 1999; Shaw, 1997). However, even though leaders may be able to assess the costs of such an intervention, the strategic benefits of trust interventions are largely unknown because we have an incomplete understanding of the antecedents of trust.

Human resources development (HRD) professionals have an interest in helping their organizations achieve the goals of their strategic plans (Gilley & Maycunich, 1998), and several prominent authors have argued that elevating levels of trust in an organization may facilitate improved teamwork and the accomplishment of organizational goals (Kurstedt, 2002; Reina & Reina, 1999; Shaw, 1997; Zand, 1972). However, critics of these interventions have argued that spending money on projects with unknown payback is overly risky (Wicks, Berman, & Jones, 1999). Based on my

experience in organizations, I have found that the costs of conducting trust interventions are likely to outweigh the benefits until we have a firm grasp of the antecedents of trust and know specifically how adult attachment and ESD influence organizational trust.

In addition to being justifiably skeptical about the benefits of a trust intervention, organizational leaders often feel defensive about low levels of trust in their organizations, and they may be reluctant to explore trust levels in their organizations or to consider investing in trust interventions. They may even fear that low levels of trust could be viewed as a sign of their inadequate leadership. Leaders in organizations frequently exhibit defensive behaviors that can hinder their own learning as well as the learning that can occur within their organizations (Argyris, 1976, 1982, 1986).

This chapter begins with a discussion of the literature on trust, followed by a brief discussion of the influence of trust on individual and organizational learning. The chapter then includes a brief discussion of a problem stemming from a gap in the literature and presents a research question that is the focal point of this study.

Background Discussion of Trust

Definition of Trust

Before proceeding with a discussion of the trust literature, it would be useful to provide a definition of trust to facilitate our understanding of the topic under discussion. There is no agreement among prominent authors on a single definition of trust (Hosmer, 1995; Kurstedt, 2002). However, this lack of agreement on a single definition is understandable. Trust is a complex construct that is not fully understood. Authors tend to view trust within the context of their respective academic disciplines and provide different definitions for trust that sometimes contribute to the confusion about what trust is and how it functions.

Many definitions focus on the willingness of an individual to risk becoming appropriately vulnerable in order to achieve a benefit. Implicit in many of these definitions is the understanding that risk is present and that blindly giving trust may bring harm rather than benefits to the individual (Elangovan & Shapiro, 1988; Kramer, 1999). The definition developed by Lewicki, McAllister, and Bies (1998) provides a basis for a discussion of trust as "confident positive expectations regarding another's conduct"

(p. 439). This definition provides a clear and simple view of trust based on expectations of another individual's conduct and also provides a beginning place for a discussion of the issue of trust on a dyadic level. Lewicki et al. (1998) also contrast trust and distrust as separate variables, although to my knowledge, there is no instrument that will allow researchers to demonstrate that trust and distrust are indeed separate variables.

In addition to the disagreement among authors about the definition of trust, there is also disagreement about whether trust and distrust are opposite extremes of the same variable or are separate variables. For example, Scott (1981) and other authors view trust and distrust as opposite extremes of the same variable (Shockley-Zalabak, Ellis, & Cesaria, 2000; Shockley-Zalabak, Ellis, & Winograd, 2000). However, Lewicki et al. (1998) and other authors contend that trust and distrust are separate variables (Kurstedt, 2003; Lewicki, McAllister, & Bies, 1998; Weidner II, 1997). Based on my experience and after reviewing the literature on trust, I am persuaded by the simplicity and intuitive appeal of the argument that trust and distrust are very likely opposite ends of a single variable. Therefore, this research is developed from that perspective.

Overview of Trust Literature

There is wide interest in several academic disciplines regarding trust, and the review of the literature will begin with a discussion of trust in early childhood. Both Erikson (1997) and Bowlby (1969) trace the origins of trust back to early childhood. In his discussion of the developmental stages of the human life cycle, Erikson states that the first developmental hurdle facing humans is to learn trust. Erikson explores the development of trust for individuals along a single continuous line, with trust at one extreme and distrust at the other extreme. Failure during the first stage in human development is characterized by distrust.

Erikson asserts that failure in a developmental stage forces the individual to return to that developmental challenge until mastery of the stage is achieved. Consistent with his theory, Erikson claims that individuals will continue to have difficulty finding satisfaction in their relationships until they learn that it is safe to trust. He acknowledges that some individuals do not learn to trust and as a result find themselves confronted with the recurring challenge of learning to trust in their relationships (Erikson, 1997). Bowlby

(1969, 1973, 1988) also focused his theory of human attachment on trust and concurs with Erikson that the inability to trust has substantial influence on the individual's capacity to form lasting and satisfying relationships throughout life.

Bowlby and other researchers argue that childhood attachment experience with the primary caregiver is biologically rooted in the survival needs of humans and that attachment experiences have substantial influence on relationships throughout an individual's life. Initial attachment experience provides the basis for a mental model of self and others that shapes interpersonal interactions throughout an individual's life (Ainsworth, 1989; Ainsworth et al., 1978; Bowlby, 1977).

Bartholomew and other researchers have built on Bowlby's theory and state that individuals who have not learned trust can be viewed as insecure individuals who will avoid friendships and intimacy because they fear personal injury (Bartholomew & Horowitz, 1991). Johnson and other researchers have found that adult attachment provides a basis for understanding and treating anguished couples who are experiencing difficulty in providing for each other's attachment needs (Johnson, Makinen, & Millikin, 2001).

Erikson (1997), Bowlby (1988), Ainsworth (1989), and other authors agree that trust is learned during early childhood and that one can view trust as a propensity or a trait that an individual carries from childhood into relationships throughout life. The trust developed in childhood is not immutable, however. Life events after childhood such as the death of a parent, spouse, or a child can change an individual's attachment orientation. Trust may also be sensitive to situational or contextual factors, for example, whether the leaders of an organization behave in a trustworthy manner, and this may help to understand different levels of trust in an organization. These contextual factors have been explored at considerable length in the literature (Gilbert & Tang, 1998; Kraines, 2001; Roger, 1995). However, a better understanding of attachment gained from the research of Bowlby, Ainsworth, and other authors may also give us a foundational understanding of key antecedents of organizational trust.

Chelune (1979), Pistole (1993), and other authors have added to our understanding of how trust for individuals may also be influenced through ESD, which

often characterizes friendships and intimate relationships (Cramer & Barry, 1997; Devencenzi & Pendergast, 1999). By sharing personal and sensitive information, individuals are able to form lasting bonds of friendship or intimacy with others and build trusting and resilient relationships that are often associated with high levels of teamwork in organizations.

ESD is influenced by an individual's attempts to find a balance between the conflicting needs of establishing connections with others to enhance personal security while at the same time maintaining the privacy that is essential to prevent the embarrassment that could result from having one's secrets revealed (Petronio, 2002). ESD could be viewed as a behavioral expression of a need to establish relationships with others in order to satisfy basic attachment needs. However, we have a limited understanding of how individuals may employ ESD in organizations in order to establish trusting bonds with coworkers and colleagues, a gap that is outside the scope of this research.

In reviewing the literature on organizational trust, I have found that authors tend to perceive trust in a way that is consistent with models that are frequently used in their own academic disciplines for explaining trust in human behavior. In the leadership literature, Barnard (1962) stresses that one of the fundamental responsibilities of a leader in any organization is to encourage cooperation among employees and groups within the organization so that the organization can survive, grow, and thrive. Barnard asserts that integrity and trust are two of the key cornerstones of the foundation for any organization. More recently, other authors have observed that trust is an alternative to costly organizational control mechanisms (Creed & Miles, 1996; Cummings & Bromiley, 1996).

Hwang and Burgers (1997) directly connect cooperation in organizations to exchange benefits and state that individuals are driven by self-interest and that the inclination of two individuals to trust each other is motivated by their desire to achieve mutual gain. Tyler and Kramer (1996) agree that there is an increased interest in trust and its relevance to teamwork as organizations shift to less hierarchical structures. Hwang and Burgers view trust as necessary for individuals to overcome fear and attain a

benefit in a situation that is perceived to be risky. Partnerships come about as individuals band together for mutual gain, and these partnerships can come apart if one party loses trust because of the perception that he or she has been exploited. Lewicki and Bunker (1996) see trust as being constituted incrementally over the course of a business relationship and state that trust is based on the predictability of another party's business actions.

Consistent with the perception of Hwang and Burgers, Boss views organizational trust as one of the keys to managerial problem solving. Boss emphasizes that threats to fire individuals and rigid adherence to unnecessary deadlines can severely damage trust in an organization and seriously diminish the organization's ability to achieve its goals (Boss, 1978). Sheppard (1998) emphasizes that laying-off employees may be a breach of the psychological contract with the employees and may severely damage the employees' trust in the organization for which they work.

Looking at trust from an economic perspective, Wicks and other authors argue that organizations should view trust as an economic asset. He encourages organizations to adopt a strategy for investing in trust based upon criteria consistent with attaining good return on investment (Wicks et al., 1999). He also cautions organizations to avoid excessive investment in trust. He asserts that the resources that are excessively invested in trust could be allocated to another purpose consistent with the organization's allocation of its resources for maximum overall return on investment.

Implications of Trust for Learning

From a knowledge management perspective, Davenport and Pruzak (1998) state that organizational trust is essential for knowledge management initiatives in organizations and that these initiatives will fail unless trust is present. They encourage leaders in organizations to make trust visible and ubiquitous and to provide models of trustworthy behavior. Davenport and Pruzak (1998) and other authors caution that the absence of trust tends to close down the informal networking and sharing of information and ideas that are at the heart of knowledge management initiatives and continuous learning (Senge, 1990; Vaill, 1996).

Although prominent authors in the fields of leadership, management, and adult

development have given considerable attention to the need for organizations to become knowledge based and to engage in continuous learning, (Argyris, 1976, 1986, 1993; Schein, 1996a), other authors provide valuable perspectives on why individuals and organizations may resist (Schwandt & Marquardt, 2000). Organizational leadership is also a variable that influences learning and the capacity of organizations to adapt to rapidly changing economic circumstances (Schwandt & Marquardt, 2000; Vaill, 1996).

Further, trust is clearly a factor that influences leadership effectiveness, particularly as leaders attempt to bring change that is consistent with their strategic vision to their organizations (Gilley & Maycunich, 1998; McClelland, 1975; Sashkin, 1992; Sashkin, Rosenbach, & Sashkin, 2001; Zand, 1997). The capacity to elicit trusting responses from other individuals is related to a leader's emotional intelligence (Goleman, 1998) as well as his or her ability to exhibit credible trustworthy behavior (Kurstedt, 2002). At a deeper psychological level, these outward behaviors are probably linked to crucial life experiences and the unconscious use of defense mechanisms (Vaillant, 1977), aspects of trust and its antecedents that are beyond the scope of this research.

Argyris also points out that individuals strive to protect themselves from injury by using defensive routines that are consistent with their beliefs and assumptions rather than opening themselves to possible injury by trusting those around them in the workplace. Defensive routines may stand in the way of an individual's learning, especially when the individual faces an anxious situation in which there is risk of embarrassment, or worse, of losing his or her job. Argyris (1976, 1982, 1993) asserts that in order to protect themselves, individuals may decline the risk of learning and behavior change and may instead continue to operate consistent with their beliefs and assumptions. This tendency to resist change was also noted by Mezirow, who states that individuals tend to operate consistent with their beliefs and assumptions. He further notes that these beliefs and assumptions are sometimes challenged by disorienting dilemmas that may be emotionally wrenching and that may force an individual to question and revise his or her fundamental beliefs and assumptions based on reflection and rational discourse with a trusted confidant (Mezirow, 1978).

Schein (1996) also agrees with Argyris that learning in organizations may be

hindered because individuals practice defensive routines. Schein also cautions that individuals often feel threatened by organizational changes because these changes in turn require search for new meaning in an organization (Berger & Luckmann, 1966; Weick, 1995) as well as behavioral changes that employees often view as threatening. For example, a change in information technology such as the use of a new software package may ripple through an organization, forcing employees to learn the new software in order to retain their jobs. Successive waves of change may even lead to changes in the organization's culture (Brooks, 1997; Schein, 1999). Schein takes this idea one step further and asserts that the leadership of the organization may have to use coercion for the employees to overcome the resistance to a cultural change (Schein, 1996a).

Statement of the Problem

Over the last decade, the topic of trust has attracted increasing interest from practitioners as well as scholars. Practitioners are particularly interested in the competitive advantage that may accrue to an organization that has high levels of trust (Barney & Hanson, 1994; Davenport & Prusak, 1998; Jones, 1998; Wicks et al., 1999). As a reflection of this interest in trust, the scholarly literature spans at least eight different fields: economics, HRD, business and management, leadership, sociology, ethics, anthropology, and systems engineering (Brooks, 1997; Kurstedt, 2002; Sheppard, 1998).

Scholars in each academic domain tend to view trust through a different lens (Argyris, 1993). For example, economists tend to view trust as a business commodity or an asset that is worthy of investment and tend to think about investing in trust to provide organizations with a high rate of return. Systems engineers tend to perceive trust as part of an interactive system and look for points of leverage in an organization to influence the outcome of a system of interactions. Systems engineers have identified trustworthy behavior as one point of leverage (Kurstedt, 2002). Trust remains a challenging topic of study because it can be viewed from so many different perspectives and because it is highly complex, having cognitive, emotional, behavioral, biological, and contextual aspects that vary over time (Barnes, 1981; Lewis & Weigert, 1985).

The research on trust has been hampered because there is no agreed-upon definition for individual or organizational trust and there are few valid and reliable

9

instruments for measuring trust that might assist researchers in their efforts to gain a deeper understanding of organizational trust. However, this problem will be difficult to overcome because researchers tend to view trust from the perspective of their particular disciplines, and developing a common definition of trust or a new instrument for measuring organizational trust is outside the scope of my proposed research. In addition, many of the researchers who are interested in trust have used qualitative methods as a part of their efforts to add to the richness of the trust literature.

Much of the current literature on trust is based on theories with researchers from different academic disciplines proposing differing definitions of trust and arguing about whether trust and distrust are opposite ends of a single variable or are distinct variables. These researchers also present differing theories about how trust functions in organizations. Although researchers from different academic fields continue to argue about what trust is and how it functions in organizations, there is wide agreement that trust, however defined, is the glue that holds organizations together (Barnard, 1962; Brien, 1998; Creed & Miles, 1996; Roger, 1995), and some authors even assert that trust contributes to organizational profitability (Reina & Reina, 1999; Shaw, 1997; Small, 2002).

Toward A Better Understanding of the Origins of Trust

The purpose of this research was to develop a better understanding of adult attachment and ESD as possible antecedents of organizational trust. Although HRD professionals may wish to help their organizations attain their strategic goals, including increased profitability (Gilley & Maycunich, 1998), we need to have a better understanding of the origins of organizational trust before designing HRD interventions to elevate trust. Trust is fragile and not easily restored once it has been broken (Lewis & Weigert, 1985). Leaders in organizations with low levels of trust may reach out for interventions that appear to promise that they will lead to higher levels of trust. However, it is difficult to design effective interventions for organizations. Kurstedt (2002), Shaw (1997), Reina and Reina (1999), and other authors who consult with organizations on trust acknowledge that it is difficult to rebuild trust in existing relationships when there is a perception by at least one party that trust has been breached

(Burke, 1997). Difficulty in constructing these interventions is, in part, a reflection of an inadequate understanding of organizational trust and its foundational antecedents.

We need to have a better understanding of the origins of organizational trust and specifically on how attachment and ESD influence trust in organizations. Several authors have demonstrated that adult attachment has substantial influence on personal relationships (Ainsworth, 1989; Bartholomew, 1990; Bowlby, 1988; Hazan & Shaver, 1987; Johnson & Greenberg, 1995). Wheeless (1978) has explored ESD as it generally occurs in an organizational setting and describes general disclosure that spans more than a single dyadic relationship as disclosiveness (DS). Wheeless' research with university students explores disclosure in general (Wheeless, 1978).

Purpose and Main Research Question

Based on my experience and a review of the literature, I thought it would be useful to explore the influence of adult attachment and DS on organizational trust. Researchers have not yet explored these potentially important relationships. This research study applied insights from the theories of Erikson (1997) and Bowlby (1988) on trust and attachment in the workplace. This research also further tested the work of Wheeless (1978) and other authors by exploring the influence of DS on the relationships with peers, supervisors, and upper-level managers in an organizational setting in order to contribute to our understanding of organizational trust.

This research also explored the complex relationships among the three constructs of adult attachment, DS, and organizational trust. The main question to be answered was:

What portion of the variance in employees' perception of organizational trust do employees' adult attachment and DS explain?

In order to explore the relationships between the three constructs that are central to this study, I used valid and reliable instruments to gather data from participants in two organizations in the Washington, D.C., metropolitan area. The analyses of the data collected were done using quantitative statistical methods that explored the relationships among the three constructs from different perspectives.

Summary

Trust is important for organizational learning and performance (Kurstedt, 2002; Reina & Reina, 1999; Zand, 1972). However, trust is often taken for granted or ignored by organizations. Senge (1990) emphasized that organizations must continuously learn if they are to survive and noted that trust facilitates individual and organizational learning. Although trust is frequently viewed as a key ingredient for successful organizational function, many authors in the literature merely mention the importance of trust, or assume trust is present, and then move on to discuss other topics as if little can be done to better understand the origins of trust or to improve the levels of trust in an organization (Gilley & Maycunich, 1998; Mayer et al., 1995). Specifically, researchers have not explored the possible influence of adult attachment and DS on organizational trust. This chapter briefly discussed a trust issue, discussed definitions of trust, reviewed the trust literature, presented a problem stemming from a gap in the literature, and posed a main research question that was the focal point of this study exploring organizational trust.

There are substantial challenges facing researchers who are interested in trust. Although Gilley strongly urges HRD professionals to play a vital role by helping leaders in their organizations attain strategic goals (Gilley & Maycunich, 1998), additional research is needed to begin to close the gap that exists in our understanding of how trust levels in an organization are influenced by adult attachment and DS. There is urgency in gaining a better understanding of organizational trust because in today's global economy, characterized by hypercompetition, an organization's ability to survive may depend in part on individual and organizational learning facilitated by trust.

CHAPTER 2
REVIEW OF THE LITERATURE
Introduction

This chapter reviews the literature relating to organizational and individual trust and explores the relationships between three constructs: adult attachment, emotional self-disclosure (ESD), and organizational trust. The chapter opens with a brief introduction to the three constructs and their relationships. It then provides an overview of the literature on organizational trust with an exploration of definitions of trust and a model looking at trust and distrust as separate variables.

The chapter then traces the trust that individuals manifest in organizations to the roots of trusting relationships developed during childhood attachment experiences (usually with the mother). The chapter continues with an exploration of the different views of trust in organizations from the management literature and then proceeds with a discussion of adult attachment bonds and implications for learning. The chapter then explores ESD and its relationships to organizational trust and adult attachment. The chapter concludes with a summary discussion of the three constructs, their relationships with each other, and a call for additional research to gain a better understanding of the relationship between organizational trust, adult attachment, and ESD and their influence on each other.

Trust plays a key role in organizational learning and performance (Kurstedt, 2002; Reina & Reina, 1999; Shaw, 1997; Zand, 1972), and organizations must continuously learn in order to survive (Senge, 1990). However, trust is often taken for granted or ignored by organizations, even though organizations have generally declined in their perceived trustworthiness (Tyler & Kramer, 1996). Although trust is important for successful organizational function and distrust is considered deleterious for organizational harmony and performance, many authors in the management literature merely mention the importance of trust, or assume the presence of trust, and then proceed to discuss other topics. This gives the impression that little can be done to improve the levels of trust among individuals in an organization (Gilley & Maycunich, 1998; Mayer

et al., 1995). For example, Drucker (1999, 1988) assumes that trust is present and is important for the exchange of knowledge within organizations and that this exchange is crucial if organizations are to successfully compete and survive. A key part of the discussion of trust that is missing from the management literature is an exploration of the origins of an individual's trust that can be traced to childhood experience. This exploration of the origins of trust may contribute key insights to a more comprehensive understanding of trust.

John Bowlby, M.D. (1969), an English psychiatrist, is credited with creating attachment theory and contends that childhood attachment to a significant caregiver (usually the mother) is biologically rooted and is crucial for a child to develop trust. Research by Hinde (1982) confirms the biological basis of attachment. Furthermore, the propensity to trust learned during childhood substantially influences a person's lifetime relationships (Ainsworth, 1989; Ainsworth et al., 1978; Bowlby, 1988). As a result of their research, Klohnen and Bera (1998) note that attachment styles developed in childhood tend to be resilient throughout life.

In family systems, attachment theory is often associated with therapy provided to couples that have distressed relationships. The therapist's grasp of attachment theory provides a basis for understanding the distress experienced by the couple as well as a basis for providing beneficial therapy, such as emotionally focused therapy (EFT) (Johnson et al., 2001).

Erikson (1997), in describing the stages of human development extending from childhood through adulthood, sees the need to develop trust and avoid distrust as the first developmental hurdle facing the individual. Bowlby (1988) focuses on attachment as a prerequisite for secure relationships later in life. Erickson uses slightly different terminology, but his message is the same: Normal human development is based on the ability to trust. Erikson also asserts that individuals who fail to develop trusting relationships will find that their personal development will be stunted because of a lack of trust.

We know from Bowlby's work as well as the work of other authors that childhood attachment has a profound influence on an individual's ability to develop trusting

relationships, including friendships, throughout life (Klohnen & Bera, 1998; Weiss, 1982). Based on the work of Chelune (1979), Petronio (2000), and Pistole (1993), we know that ESD also facilitates bonding between individuals in a dyadic relationship by helping people to build friendships and that the willingness to self-disclose is based on a feeling of trust in the target of the self-disclosure. Self-disclosure in relationships tends to be reciprocal and to occur progressively over time and helps individuals to form friendships and intimate relationships. These friendships and relationships are formed in part through the process of sharing personal and sensitive information with each other in steps that could be viewed as part of a bonding or attachment process. Furthermore, other individuals choose as targets or recipients of their ESD individuals whom they trust will not hurt them, either through critique or the careless release of the shared information that is personal and sensitive.

Based on the work of Erikson and Bowlby, we know that the capacity to trust is very important for individual development of satisfying relationships that nurture personal growth, and based on the work of Chelune and others, we know that ESD facilitates bonding between individuals and the formation of friendships and intimate partnerships. Trust is also crucial for organizational learning and performance (Kurstedt, 2002; Reina & Reina, 1999; Shaw, 1997; Zand, 1972). Unfortunately, we have an incomplete understanding of how childhood attachment, ESD, and the individual's propensity to trust influence an individual's behavior in organizations, including interpersonal networking and sharing of information, which are crucial for individual as well as organizational learning.

Because there has been a substantial body of qualitative literature developed particularly over the last 10 years, some well-designed quantitative empirical studies have helped to increase our understanding of trust and clarify some of these contentious issues (Cross & Belli, 2004, in press; Korsgaard, Broadt, & Whitener, 2002). However, it would be helpful to examine a definition of trust before proceeding.

Overview of the Literature on Trust

Definition of Trust

There is no agreement among prominent authors on a single definition of

individual or organizational trust (Hosmer, 1995; Kurstedt, 2002). This lack of agreement on a definition of trust means that different authors not only may perceive trust in different ways but also may discuss different constructs when they speak of trust. A definition of trust developed by Shockley-Zalabak and associates (2000) captures one view of organizational trust and provides an introduction to the complexities of defining trust and conducting research on trust. Their view of trust is that trust and distrust are opposite ends of a single variable and are inversely related to each other. We will also examine a model of trust and distrust presented by Lewicki et al. (1998) that is based on the contention that trust and distrust are separate but linked dimensions.

The Shockley et al. definition focuses on the willingness of an individual to risk becoming appropriately vulnerable in order to achieve commonly held goals and is based on four factors developed by another researcher (Mishra, 1996). The Shockley et al. definition connects trust to the accomplishment of individual, group, and organizational goals. Implicit in this definition is the understanding that risk is present and that blindly giving trust may bring harm rather than benefits to the individual (Elangovan & Shapiro, 1988; Kramer, 1999). The leadership of an organization can also play a key role by fostering the development of trusting behaviors within the organization (Sashkin & Rosenbach, 1998), although Shockley-Zalabak et al. did not focus their research on organizational leadership. Shockley-Zalabak et al. (2000, p. 8) define trust as follows:

> The organization's willingness, based on its culture and communication behaviors in relationships and transactions, to be appropriately vulnerable if it believes that another individual, group or organization is competent, open, and honest, concerned, reliable, and identified with common goals, norms and values.

As a part of the research, Shockley-Zalabak et al. also developed a model consisting of five factors and an instrument consisting of 29 items. The five factors are (a) competence; (b) open and honest communication; (c) concern for employees; (d) reliability; and (e) the sharing of common goals, norms, and values. The breach of any one of these factors can damage the individual's perception of trust. For example, trust is engendered by shared values, and if teams within an organization do not share similar values, this may lead to distrust and deteriorating organizational performance (Sitkin &

Stickel, 1996).

Although the Shockley-Zalabak instrument appears to be useful in measuring organizational trust, it does have some shortcomings.

Shortcomings of the Shockley-Zalabak et al. Instrument

As a result of reviewing the Shockley-Zalabak et al. instrument for measuring organizational trust, I concluded that it has three shortcomings. First, although Shockley et al. used structural equations modeling and path analysis to develop a model of organizational trust, job satisfaction, and effectiveness, their discussion of the model is brief. It is not clear what the relationship is between the five trust factors they identify and organizational trust. Second, I found no table showing how the items in their instrument loaded to the factors in their model. Such a table would have helped the reader to understand that there were no problems, such as cross-loadings of the items that could have reduced the reliability of the instrument.

Third, I found no factor analysis in their report that displayed the correlations between the factors that make up trust in their model. There may be correlations between the five factors they identify (e.g., between concern for employees and reliability) that could be strong enough to raise questions about whether multicollinearity (Allison, 1999) could have influenced the results they reported. Although I requested that the authors provide me a factor loading table and a correlation matrix, I did not receive either of these tables.

Because of these shortcomings, I used an instrument developed by Scott (1981) to conduct the research on organizational trust that is discussed in chapter 3 of this dissertation. Scott grounds his items in the literature regarding organizational trust and key organizational relationships that are pivotal to trust. These relationships include trust in peers, supervisors, and upper-level management. Scott confirms through factor analysis that his items load to the anticipated factor and concludes that the measures developed are consistent with the conceptual framework of organizational trust and that they are also internally consistent. He reports that the three factors all have eigenvalues greater than 1.0 (Scott, 1981). Scott views trust as a single variable, with high trust and low trust at opposite extremes of this variable.

In most of the literature on trust, there appears to be an underlying assumption that trust and distrust are opposite extremes of a single variable. However, Lewicki et al. (1998) present a different view. Their model is based on the assertion that an individual may approach a situation in an organization with both trust and distrust simultaneously and that trust and distrust are separate variables.

Model of Trust and Distrust of Lewicki et al.

Lewicki et al. (1998) state that trust implies risk. They define trust quite differently from Shockley-Zalabak et al. and also link trust to distrust. Lewicki et al. define trust as "confident positive expectations regarding another's conduct," and they define distrust as "confident negative expectations regarding another's conduct" (p. 439). They provide a model (see Table 2.1) that is useful for examining trust in individuals and organizations and for showing how trust may change over time (Lewicki et al., 1998). They draw the connection between individual trust and the collective trust that constitutes organizational trust and state that trust provides a foundation for social order. Their model demonstrates the interplay of trust and distrust in interpersonal transactions encountered in the workplace, consistent with their view that trust is established between individuals. Lewicki et al. also explain that trust and distrust are two dimensions that are interconnected, that they exist along indefinite continuums, and that both are often present in interpersonal situations.

Table 2.1 **Integrating Trust and Distrust**

High Trust Characterized by Hope, Faith, Confidence, Assurance, Initiative	Quadrant 1 High Value Congruence, Interdependence Promoted, Opportunities Pursued, New Initiatives	Quadrant 2 Trust but Verify, Relationships Highly Segmented and Bounded, Opportunities Pursued, Down-side Risks/Vulnerabilities Continually Monitored
Low Trust Characterized by No Hope, No Faith, No Confidence, Passivity, Hesitance	Quadrant 3 Casual Acquaintances, Limited Interdependence, Bounded, Arms-length Transactions, Professional Courtesy	Quadrant 4 Undesirable Eventualities Expected and Feared, Harmful Motives Assumed, Interdependence Managed, Preemption: Best Offense is a Good Defense, Paranoia
	Low Distrust Characterized by No Fear, Absence of Skepticism, Absence of Cynicism, Low Monitoring, No Vigilance	**High Distrust** Characterized by Fear, Skepticism, Cynicism, Wariness and Watchfulness, Vigilance

Note: Adapted from (Lewicki et al., 1998)

The Lewicki et al. model is useful for developing a better understanding of the dynamics and ambiguities of trust and distrust as illustrated by individual's reactions in an organizational situation. For example, when high trust and low distrust are present, individuals take an active role in the workplace by pursuing new initiatives and opportunities (Quadrant 1). Under conditions of high trust and low distrust, individuals tend to perceive each other as partners pursuing common objectives. They are also likely to identify with the values of their partner as well as have positive affect for their partner. Partners are likely to manifest their support for each other through expressions of appreciation, support, and encouragement and to promote positive interdependence in part by monitoring and acting to repair the trust bond between them. On the other hand, when high distrust and low trust exist between individuals, harmful motives on the part of others are assumed and defensive reactions predominate (Quadrant 4).

The information presented by Lewicki et al. in Table 2.1 ties to extensive research by Argyris (1993), who concluded that many individuals, including managers, in organizations operate in a defensive manner and tend to focus on their own best interests. Argyris also points out that the defensive actions taken by individuals in organizations can contribute to a disparity between espoused values and the values in use in the organization and that defensiveness can also hinder organizational learning. The observation of Lewicki et al. that trust and distrust are often both present at the same time also connects to Kramer's (2002) observation that it is often wise to be wary in the workplace.

Shortcomings of the Lewicki et al. Model

Although the Lewicki model is helpful in understanding trust, it also has five shortcomings. In fairness, Lewicki et al. may have considered a discussion of some of these issues to be beyond the scope of their article. First, they do not explain why some individuals have a higher level of trust when approaching a given situation. According to Duffy et al. (2001), some of this propensity to trust could be explained by developing a better understanding of attachment theory. Second, the model is somewhat simplistic because it places individual reactions into four distinct categories and thereby omits ambivalent reactions that do not fit neatly into one of the four categories. Although Lewicki et al. discuss ambivalence, their model nevertheless provides a general and simple presentation of an individual response that tends to sacrifice accuracy (Simon, 1972; Weick, 1979; Wilber, 2000).

Third, the model is biased toward high trust and low distrust as a desirable approach to a situation for an individual. However, this may not be the most prudent approach for an individual to take. Lewicki et al. do not discuss when wariness may be advisable for an individual confronting a given situation (Kramer, 2002), although those individuals who routinely distrust lose the opportunities that accrue to those who do trust (Kramer, Brewer, & Hanna, 1996). Fourth, the model does not present how an individual's developmental mode may influence his or her willingness to engage in exploration and experimentation in the workplace, which are crucial for individual learning (Boydell & Leary, 1996). The willingness to explore and experiment may come

from a propensity to trust that may be related to childhood attachment (Duffy, Lafferty, & Lafferty, 2001). Fifth, and finally, Lewicki et al. do not make the connection between moral development (Bowlby, 1973; Loevinger, 1987) and an individual's propensity to engage in trustworthy behavior that is a key to setting virtuous cycles of trust in motion (Kramer et al., 1996; Kurstedt, 2002).

Despite its shortfalls, the model does provide a starting point for understanding trust in an organization. Lewicki et al. state that the view commonly expressed in the literature that trust and distrust are opposite ends of the same variable is an incorrect view and that trust and distrust are separate but linked variables. Although their view of trust is intriguing, the work of Lewicki et al. is at the theory-building stage of development, and I have not seen any quantitative empirical work that confirms that their view of trust and distrust is accurate. Additional research needs to be done to demonstrate that these are indeed separate variables and that they are not so heavily correlated with each other that they in fact need to be viewed as opposite ends of a single variable.

Before reviewing the model of Lewicki et al., I would have been inclined to view individual trust and distrust consistent with Erikson's presentation (1997) and from the perspective that trust and distrust are opposite ends of the same variable and therefore inversely correlated. However, despite its complexity and shortfalls, the Lewicki et al. model may be correct in that trust and distrust can be viewed as separate variables. Some authors concur with Lewicki's view that trust and distrust are separate variables (Kurstedt, 2003; Weidner II, 1997); however, many other authors writing about trust view trust and distrust as opposite ends of a single variable (Dirks & Skarlicki, in press; Hwang & Burgers, 1997; Korsgaard et al., 2002; Kramer, 1999; Scott, 1981). A well-conducted quantitative research study might help to illuminate this issue of whether trust and distrust are separate variables. Unfortunately, I am not aware of a valid and reliable instrument that would allow a researcher to examine this issue, and developing such an instrument is beyond the scope of this research.

Tracing Trust to Childhood

There is a wide interest in several academic disciplines regarding trust, and my review of the literature will begin by exploring how trust develops in early childhood.

Both Erikson (1997) and Bowlby (1969) trace the origins of trust back to early childhood. In his discussion of the developmental stages of the human life cycle, Erikson states that the first developmental hurdle facing humans is to learn to trust. Erikson asserts that failure in a developmental stage forces the individual to return to that developmental challenge until mastery of the stage is achieved. Erikson explores the development of trust along a single continuous line, with trust at one extreme and distrust at the other extreme. Failure during the first stage in human development is characterized by distrust. As seen through Erikson's lens, trust is a single variable, with trust at one extreme and distrust at the other extreme.

Consistent with his theory, Erikson claims that individuals will continue to have difficulty finding satisfaction in their relationships until they learn that it is safe to trust. Erikson (1997) acknowledges that some individuals do not learn to trust and as a result find themselves confronted with the challenge of learning trust in their relationships until they attain some undefined level of trust.

Bowlby (1969) also focuses his theory of human attachment on trust and concurs with Erikson that the inability to trust has substantial influence on the individual's capacity to form lasting and satisfying relationships throughout life. Kotler and Omedei (1988) traced attachment over the course of the life span and found that secure attachment contributed to healthy and satisfying marriage relationships. Other authors found that secure attachment had a strong positive influence on the capacity of an individual to provide care and comfort in intimate relationships (Feeney & Collins, 2001). Conversely, researchers have noted that a disturbed attachment can lead to human pathology (George, West, & Pettem, 1999; Parkes, 1982). Bartholomew (1990) builds on Bowlby's theory and states that individuals who have not learned to trust can be viewed as insecure individuals who will avoid intimacy because they fear personal injury. Bartholomew notes that these individuals are insecure and likely to avoid intimate relationships and deep friendships.

Erikson, Bowlby, and Bartholomew are of a similar position--that trust is learned early in life and that one can view trust as a propensity or a trait that an individual carries from early childhood into relationships throughout life. Part of the reason why

attachment style may be so influential on later relationships is that a model of attachment relationships is carried mentally by the individual, often at an unconscious level (Bowlby, 1988; Gould, Voyer, & Ford, 1998; Mikulincer, Gillath, & Shaver, 2002; Pistole, 1997). The propensity to trust may be modified by life experiences after early childhood, and trust may also be sensitive to situational or contextual factors that may vary because of the perceived risk or personal vulnerability in a given situation. Researchers have noted that major life events such as the death of a parent, foster care, parental divorce, chronic severe illness of a parent or child, drug or alcohol abuse, or childhood experience of physical or sexual abuse can influence a formerly secure attachment (Ainsworth, 1982; Bowlby, 1973; Waters, Merrick, Treboux, Crowell, & Albersheim, 2000).

Views of Trust From the Management Literature

In much of the literature on trust, there appears to be an underlying assumption that trust and distrust are a single variable with two extremes, one marked by high trust and the other extreme marked by high distrust. Likewise, many authors appear to have a bias toward trust in presenting their ideas. For example, in the leadership literature, Barnard (1962) stresses that one of the fundamental responsibilities of the leaders in any organization is to encourage cooperation among employees and groups within the organization so that the organization can survive, grow, and thrive. He and other authors also assert that integrity and trust are two of the key cornerstones of the foundation for any organization.

Whitener (1998) agrees with Barnard that trust is the responsibility of managers and encourages managers to take specific steps in five categories in order to build trust in their organizations. The five categories are behavioral consistency, behavioral integrity, sharing and delegation of control, communication (e.g., accuracy, sharing of explanations, and communication openness), and demonstration of care (Whitener, 1998). These five categories appear to be remarkably similar to the factors in the Shockley-Zalabak et al. (2000) model. It is also interesting to note that in her article, Whitener focuses on only a portion of the transaction between a manager and a target of the transaction. She implies that managers through their actions can influence trust without considering the actions of the target (often an employee) or the target's emotional

response to the manager's actions.

Unfortunately, Whitener also does not delve into some of the deeper questions regarding trust, for example, through an exploration of the influence that factors such as adult attachment or ESD might have on trust in the organization. Whitener chooses to focus on exchange theory to explain trust and also excludes the perspective of how trust can be viewed as a socially constructed reality, possibly because she may have believed that the discussion of other factors that influence trust was outside the scope of her article.

Hwang and Burgers directly connect cooperation in organizations to exchange benefits and state that humans are driven by self-interest and that the inclination of two individuals to trust each other is motivated by their desire to achieve mutual gain. Hwang and Burgers view trust as necessary for individuals to overcome fear and attain a benefit in a situation that is perceived to be risky. Partnerships come about as individuals band together for mutual gain, and these partnerships can break apart if one party loses trust because of the perception that he or she has been exploited. Other authors have also noted the increased interest in trust as organizations become less hierarchical and place increasing reliance on teams of individuals that are held together by trust (Lewicki & Bunker, 1996; Tyler & Kramer, 1996)

Consistent with Hwang and Burgers, Boss (1978) views trust as one of the keys to managerial problem solving. He emphasizes that threats to fire individuals and rigid adherence to unnecessary deadlines can severely damage trust in an organization and seriously diminish the organization's ability to achieve its goals. Sheppard (1998) emphasizes that laying off employees may be a breach of the psychological contract with the employees and severely damage the employees' trust in the organization for which they work. Kramer notes that breaches of the psychological contract can lead to rage (Kramer et al., 1996). Lewicki and Bunker also caution that perceived breaches of trust can unleash powerful emotions, including anger and fear. Other authors have noted that perceived breaches of trust, including lying, stealing, and abusing authority, can cause individuals to seek revenge and even resort to violence (Bies & Tripp, 1996).

Viewing trust from an economic perspective, Wicks et al. argue that organizations

should consider trust as an economic asset. Wicks states that organizations should adopt a strategy for investing in trust based upon criteria consistent with attaining good return on investment. He also cautions organizations to avoid excessive investment in trust. He asserts that the resources that are excessively invested in trust could be allocated to another purpose consistent with the organization's allocation of its resources for maximum overall return on investment. Other authors caution, however, that there can be major costs that result from trust failures (Creed & Miles, 1996). The recent failures of Enron (Kramer, 2002) and Arthur Anderson provide stark examples of the costs resulting from major breaches of trust.

From a knowledge management perspective, Davenport and Pruzak (1998) state that trust is essential for knowledge management initiatives in organizations and that these initiatives will fail unless trust is present. They encourage leaders in organizations to make trust visible and ubiquitous and to model trustworthy behavior. Several authors have noted that the absence of trust tends to close down the informal networking and sharing of information and ideas by individuals and team members that are at the heart of knowledge management initiatives and continuous learning (Davenport & Prusak, 1998; Senge, 1990; Vaill, 1991). Attachment theory and the insights that it provides regarding organizational trust will now be discussed.

Attachment Theory and Adult Attachment Bonds

Hazan and Zeifman (1994) have noted that one of the basic assumptions of Bowlby's theory is that attachment style will substantially influence an individual's lifetime behavior. They also state that humans are innately predisposed to form bonds with primary caregivers as a means of survival and define attachment, consistent with the work of Bowlby and Ainsworth, in terms of four basic components of behavior: "proximity seeking, separation protest, safe haven and secure base" (Hazan & Zeifman, 1994), p. 152). Attachment is, therefore, of key importance because of its influence on the predisposition of individuals to trust as they live out their lives. Researchers have noted the health benefits accruing to the securely attached. Several authors have reported that the securely attached are significantly less likely than the insecurely attached to be negatively influenced by anxiety, hostility, depression, loneliness, and symptoms of

illness (Hazan & Shaver, 1990; Kobak & Sceery, 1988). Humans seeking security throughout their lifetimes is consistent with their needs for safety (Maslow, 1954). Maslow observed that the requirement for safety is at the second level of human needs, immediately after physiological needs are satisfied. This leads us to a discussion of attachment theory and the development of adult relationships.

Attachment and the Development of Adult Relationships

Bartholomew and Horowitz (1991) build on the work of Bowlby and develop a grid to help explain adult behavior based on attachment. For example, Bartholomew and Horowitz state that individuals who develop secure attachments in early childhood tend to be secure individuals later in life and that their relationships tend to be characterized by low dependency on others as well as positive regard for others. They further state that secure individuals tend to have relationships that are comfortable, with a good balance between intimacy and autonomy (Bartholomew, 1990). On the other hand, individuals who do not develop secure attachments during early childhood may have relationships characterized by fear of intimacy and avoidance of social contact. Bartholomew and Horowitz state that the latter group of insecure individuals tends to have relationships marked by a negative view of self and others as well as a high degree of dependency.

The therapist's grasp of attachment theory can provide a basis for understanding the distress experienced by the adult couple as well as a foundation for needed therapy, including EFT (Feeny, 1990; Johnson, 1999; Pistole, 1994, 1997). The therapy provided for these couples often focuses on working with each of the partners in the relationship to facilitate open communication of caring feelings to reduce the partners' sense of hopelessness and pain and to restore trust and affection to the relationship. Just as secure attachment and trust are crucial for healthy and less stressful relationships between individuals (Kotler & Omodei, 1988; Mikulincer, 1997), trust is also the glue that helps to hold relationships together in the workplace (Gibb, 1991).

Bartholomew and Horowitz Model of Adult Attachment

In order to more fully understand the implications of attachment for adult relationships, it would be useful to examine the model of Bartholomew and Horowitz (see Table 2.2) that provides insight into adult attachment and into how individuals

approach their relationships.

Table 2.2 **Perception of Self in Relation to Others** (Level of Dependence)		
	Positive (low)	Negative (high)
Perception of Other Positive (low avoidance)	Cell 1 **Secure** Comfortable with intimacy and autonomy	Cell II **Preoccupied** Preoccupied with relationships
Perception of Other Negative (high avoidance)	Cell III **Dismissing** Dismissing of intimacy Counter-dependent	Cell IV **Fearful** Fearful of intimacy Socially avoidant

Note. Adapted from (Bartholomew & Horowitz, 1991)

This model is helpful in providing a framework for understanding how individuals tend to approach intimate relationships. It does, however, have some weaknesses.

Shortcomings of the Model of Bartholomew and Horowitz

As a result of reviewing the Bartholomew and Horowitz model, I concluded that it has three shortcomings. First, it requires a background of understanding in the family systems domain because some of the words such as "counter-dependent" are not commonly used in other academic areas. Second, it is limited in its representation of complex human behaviors. The model provides simplified categories for approaches, but it does not address ambivalent responses that fall between the categories. For example, what cell does an individual fit into who has not had a secure childhood attachment and is preoccupied with relationships (consistent with Cell II) but who still relishes the intimacy and autonomy offered by a stable marriage (consistent with Cell I)? General and simple explanations are more easily grasped, but they sacrifice accuracy because they are often overly simplistic (Simon, 1972; Weick, 1979; Wilber, 2000). Third, the model and the article written by Bartholomew and Horowitz do not explain how someone can repair weak attachment bonds developed during childhood in order to achieve the secure attachments they crave in intimate and autonomous relationships. In fairness, however, Bartholomew and Horowitz may have felt that exploring this issue was outside the scope

of their article.

Nevertheless, the thrust of the model is consistent with the findings of Kurstedt, who observes that a secure person tends to approach relationships in the workplace in an open and friendly manner and that this approach helps to provide the basis for a virtuous cycle of trust (Kurstedt, 2002). This open and friendly approach makes possible the networking between individuals and the formation of bonds of trust that facilitate individual learning as well as organizational learning (Senge, 1990).

Implications of Secure Attachment for Adult Learning

In looking at attachment from a slightly different perspective, other authors observe that individuals with secure attachments tend to be more resilient when confronted with failure (Hazan & Shaver, 1990; Mikulincer & Florian, 1998). In her research on children, Ainsworth (1982) and other authors note that securely attached children are more eager to explore and more persistent in exploring their environment than less securely attached children (Ainsworth, 1982; Ainsworth et al., 1978). Other authors have observed that the securely attached are better able to process information during intervals of high stress (Lopez, 1995). This may help to explain why some individuals approach learning tasks with a mastery rather than a performance orientation (Dweck, 1999). Learners who strive for mastery are interested in exploring and experimenting consistent with Boydell's and Leary's (1996) modes of learning.

In keeping with Dweck's theory, Boydell and Leary state that these learners are not only curious but also relatively less afraid of failure in comparison to learners who have a performance orientation and rely on an external standard by which to measure their performance and affirmation. Because they fear failure, this latter group of learners tends to shy away from challenging assignments. However, curious learners tend to perform well and are often considered productive in their organizations (Reio & Wiswell, 2000). An exploration of trust and adult attachment could shed light on how individuals develop a mastery orientation toward learning and how this orientation is influenced by trust. The insight gained from such an exploration could provide insights into how learning could be facilitated at the kindergarten through twelfth (K-12) grade levels as well as at colleges and universities.

Secure attachment may provide insight into the differing learning approaches for individuals with a mastery orientation versus those with a performance orientation. Exploring the possible nexus between the learning orientations of individuals and the level of secure attachment may be a useful avenue for further research exploration. This extension of attachment theory is consistent with the relevance of attachment theory to understanding a wide range of social issues, including child abuse, domestic violence, divorce, delinquency, drug abuse, depression, and teen pregnancy (Hazan & Shaver, 1994).

Attachment theory provides a valuable lens for viewing social problems because it helps explain why individuals who do not form secure attachments during childhood tend to struggle to understand and maintain their intimate relationships (Rholes, Simpson, & Stevens, 1998) as well as their work relationships. These individuals sometimes seek family therapy in order to better understand their relationships with their intimate partners and to form more satisfying relationships

Example of a Disturbed Attachment

Bartholomew's model provides a useful framework for understanding how individuals approach interpersonal situations, and I recently had an experience that brought Bartholomew's framework into clear focus for me. During the summer of 2002, my wife and I invited an 11-year-old niece whose family lived in Colorado to stay with us for 6 weeks. April (a pseudonym) came into the world in difficult circumstances. She was conceived out of wedlock, and her father was about 30 years older than her mother. April's parents never lived together, and her biological father was violent with April when she was very young--even trying to drown her. The father is now under court order to stay away from April and her mother. Partly because April's mother could not afford to take care of her, April lived with her grandmother soon after she was born until she was 2. This grandmother died when April was about 5. April's mother and her stepfather both abuse alcohol and drugs.

April grew up with a disturbed attachment. She was separated from her mother, who was not very trustworthy (Kurstedt, 2002), and her father was violent and even tried to kill her. As a result, April learned that she could not trust her biological parents, and

her grandmother, with whom she might have had a better relationship, died. April is closer to her stepfather, who appears to genuinely love her, than to her mother. However, her stepfather is not a reliable caregiver in that he is an alcoholic and has been arrested several times for driving while intoxicated and subsequently had his driver's license suspended.

As a result of her disturbed attachment, April has not felt the love that is essential for the development of a secure attachment, a sense of self-esteem, and the capacity to trust others. When April stayed with us, both my wife and I were struck by how she behaved in relationships with others. Although she craved friendships, she told us that she had no friends at school. She also craved our love, and she became depressed if she was not the center of our attention and admiration.

She needed constant reassurance that we loved her, and her focus was on her need to be loved. Moreover, April did not seem to have the base of self-esteem to be able to reach out to others and demonstrate loving care for anyone else. Her focus was totally on herself, and as a result, my wife and I felt emotionally exhausted and inadequate to meet her needs.

In the framework of Bartholomew's model, April could be seen as having a negative view of herself because of her insecure attachment, but at the same time she had a positive perception of some other individuals in her life. She was certainly preoccupied with relationships, consistent with Cell II of the model (Table 2.2) developed by Bartholomew and Horowitz (1991). In their longitudinal study covering a period of 31 years of the attachment behaviors of women, Klohnen and Bera (1998) found support for Bowlby's (1969) theory that attachment patterns tend to be stable for the individual over the life span. This study suggests that April needs appropriate counseling and other professional help to establish a higher level of secure attachment or she may face a life characterized by a preoccupation with relationships.

The next section introduces the construct of ESD, starting with a definition of this construct. This definition will be followed by a discussion of the connections of ESD to adult attachment and trust, the complexity of ESD, and the importance of understanding trust in organizations.

Emotional Self-Disclosure and Interpersonal Bonds

As with many of the constructs such as trust in the social sciences, there are several definitions of ESD, and authors tend to view ESD with different lenses depending on their educational background and their academic specialty. For purposes of this chapter, I will use a definition of Chelune (1979), who defines ESD as "a person's voluntary revelation of personal information that a receiver could not learn from any other source" (p. 80). In particular, the noteworthy elements of this definition are that the disclosure must be voluntary, that the information is personal in nature, and that the information cannot be obtained from another source. Another way of viewing this disclosure is to use the model of the Johari Window, which implies that ESD comes from that which is hidden from the target of the disclosure and that the person disclosing the information is consciously aware of it (Luft, 1969).

ESD is frequently discussed as a dyadic and reciprocal phenomenon occurring between two individuals (Derlega, Metts, Petronio, & Margulis, 1993; Jourard, 1971; Wheeless, 1976). The initiator of ESD verbally reveals information that is emotional in its content to a target person that falls into one of three categories: (a) personal information (e.g., relating to childhood experience), (b) evaluation information (e.g., commenting with judgment about another person or a situation), and (c) relational information (e.g., disclosing feelings about another person) (Baxter & Montgomery, 1996).

There are societal rules for what constitutes appropriate ESD that are constructed and reflect the culture or the subculture of the group to which the discloser and the target belong (Allan, 1993; Steele, 1975; Won-Doornik, 1985). Generally, appropriate disclosure is consistent with the intimacy level of the relationship, and the disclosure itself is made at a time and in a manner that is viewed as respectful by the target of the disclosure (Steele, 1975).

ESD provides an avenue for connection to others and is integral to the formation and maintenance of friendships both within and outside the workplace. ESD also plays a role in dissolving relationships, for example, when one member of a friendship dyad gradually or abruptly refuses to engage in ESD with the other party (Derlega et al., 1993).

ESD is shaped by an individual's attempts to balance conflicting needs and requirements and is sometimes characterized as dialectical in nature. For example, individuals face the conflicting demands of balancing intimacy and autonomy when they decide to engage in ESD. Likewise, individuals need to find a good balance for other conflicting demands, including the desire to disclose and yet maintain privacy and the desire to be friendly while they compete with a friend in the workplace (Baxter & Montgomery, 1996; DeCew, 1997; Hubbartt, 1998; Rawlins, 1992).

Risk is inherent in ESD, and individuals who decide to engage in ESD must face the possibility that they will damage their image in the eyes of the target person. In addition, disclosers lose some control over the information disclosed, and they may even damage their relationship with the target person, for example, as a result of saying something that hurts the target's feelings (Baird, 1977; Baxter & Montgomery, 1996; Jacobs, Hyman, & McQuitty, 2001). Indiscreet disclosure may also expose the individual who revealed sensitive information to gossip in the office. It can be painful for an individual to find that he or she is being judged harshly and is being subjected to the aggression that is inherent in gossip (Bergmann, 1993; Schneider, 1977; Steele, 1975). As a result of the dangers inherent in ESD, individuals frequently try to protect themselves from harm by curtailing their ESD (Afifi & Guerrero, 1998; Bavelas, Black, Chovil, & Mullett, 1990; Cupach & Metts, 1994).

Connections Between Adult Attachment, ESD, and Trust

Some connections between adult attachment, ESD, and organizational trust have been made in the literature. For example, in discussing psychological attachment in organizations, authors have noted the benefits of attachment in terms of increased prosocial behaviors by employees and reduced turnover, but they often fail to explore the connection to attachment theory (O'Reilly III & Chatman, 1986). However, Mikulincer and Nachson (1991) connect attachment and ESD in their research and find that securely attached individuals are better able to emotionally self-disclose in an appropriate way that facilitates the development of friendships. Other authors make the connection between the propensity to trust that is developed during childhood and the propensity to engage in ESD (Derlega et al., 1993; Vangelisti & Banski, 1993).

Although there is a basis for connecting the constructs of attachment and ESD in order to better understand organizational trust, there is limited discussion of the constructs, and these discussions are usually focused on particular academic areas. For example, authors in family systems focus attachment theory for its value in understanding the disturbed attachment between partners in a couple (Johnson & Sims, 2000) or in order to understand the emotional needs of those seeking therapy (Pistole, 1999). One exception is the work of Wheeless and Grotz (1977), who noted, based on their study, that there was a "modest linear relationship between individual trust and various dimensions of self-disclosure" (p. 250). As a part of a body of work on the connections between ESD and trust, Wheeless (1978) developed instruments for measuring the solidarity between individuals, ESD, and a generalized ESD that he calls disclosiveness. However, as a part of his work, Wheeless did not explore the connections between individual trust and the collective trust in organizations.

There has been considerable interest in ESD in the fields of communications and social and personal relations, but little has been written in the field of management science (Baxter & Sahlstein, 2000). Some management literature has been focused on the commercial advantages that can accrue from ESD, for example, on how insurance agents can use ESD as a way of cementing long-term relationships with clients (Jacobs et al., 2001). The article by Jacobs et al. explores the commercial advantages of self-disclosure from the perspective of self-presentation and relationship manipulation rather than focuses on the emotional benefits that may accrue to the agent as a result of forming a friendship bond with a client. If the target of ESD detects the attempt at manipulation, the target could feel a diminished level of trust in the individual who is disclosing. Other authors such as Rawlins and Baird have noted that there are organizational benefits that can be attained from ESD, such as information sharing, teamwork, and productivity (Baird, 1977; Rawlins, 1992).

Hossack also explores ESD by leaders in an organization that presents the perspective that leaders who are willing to self-disclose tend to be more certain of themselves and more self-confident than those leaders who avoid self-disclosure (Hossack, 1993). In his article, Hossack notes that in order to be willing to emotionally

self-disclose, the leader has to be willing to risk vulnerability. Unfortunately, the article is very brief and does not provide information regarding the responses of 150 Canadian leaders to the author's questionnaire or any of the details from Hossack's interviews with 15 leaders of private sector companies. Hossack also does not explore the potential negative consequences that can arise as a result of the inappropriate disclosure of sensitive information (Ubel et al., 1995). Although trust is often associated with the willingness to risk vulnerability through ESD, Hossack does not directly discuss individual trust in the article but rather focuses on the connection between the leaders' self-disclosure and their relatively high levels of self-confidence.

Why Is Emotional Self-Disclosure Important?

ESD plays a key role in the development and maintenance of friendships (Derlega et al., 1993), and these friendships can provide the foundation for teamwork, information sharing, and productivity (Baird, 1977; Rawlins, 1992). In addition, the benefits of ESD have long been recognized by therapists (Genero, Miller, Surrey, & Baldwin, 1992; Jourard, 1971; Rogers, 1961). In counseling and therapy, appropriate emotional self-disclosure by the client is often considered a sign of psychological health and indicative of a capacity for sustaining intimate relationships (Colvin & Longueuil, 2001; Vangelisti, 1994; Vangelisti & Banski, 1993; Waters, Hamilton, & Weinfield, 2000; Watkins, 1990). In her research, Pistole (1993) and other authors found that individuals who were able to self-disclose tended to have more satisfying intimate relationships, experience less stress, and therefore have better emotional health (Cramer & Barry, 1997; Devencenzi & Pendergast, 1999; Dindia & Allen, 1992; Forbes & Roger, 1999; Pistole, 1993).

Improved connectedness to others and stress reduction are frequently linked to better overall health (Benson, 1979, 1987; Bolger & Kelleher, 1993; Hallowell, 1999; Seyle, 1997; Stiles, Shuster, & Harrigan, 1992). Skilled therapists learn to become adept at evaluating the truthfulness of ESD by their clients and recognize that meaningful disclosures may be connected with defensiveness (Horowitz, Milbrath, Reibord, & Stinson, 1993). In their work with couples in distress, Johnson et al. (2001) found that the attachment bond between the couple was weakened by the partners' inability to express caring feelings for each other.

Johnson et al. observed that the disclosure of caring feelings was blocked for disturbed couples that came to Johnson for therapy. The typical dance of the couples in Johnson's practice was that the man withdrew behind a stonewall of silence and the woman was angry and attacking. In this vicious cycle of communication, the self-disclosure could be characterized as negative venting. The woman expressed her anger that her needs were not being met in the relationship, and the man heard the anger and withdrew in pain and silence (Johnson, 1999). Unfortunately, the man's withdrawal only further enraged the woman. The venting of anger and cynicism can also be highly destructive in a marriage (Gottman, 1991). Gottman notes in his metaphor of the four horsemen that unless the vicious cycle of venting and withdrawal can be arrested and a more caring relationship reestablished, the marriage is likely to dissolve. Vicious cycles of communication can also be destructive in the workplace (Goleman, 1998; Kurstedt, 2003).

In her therapy interventions with these distressed couples, Johnson used attachment theory as a foundation for understanding the pain that the couple was experiencing and their need to find a way to break the vicious cycle of negative communication that had developed between them. The couple needed to restore the caring communication that nurtured and restored their relationship as well as their feeling of safety and satisfaction in the marriage. The turning point in the therapy occurred with the "softening moment," when the husband stopped retreating from his wife and initiated caring communication with her (Johnson, 1999). This emotional self-disclosure by the husband required that he stop retreating emotionally from his wife and make himself vulnerable, expressing his pain and offering his caring concern.

Johnson gradually builds toward this moment of self-disclosure in the therapy process and has found, based on her clinical experience, that the desired outcome for the therapy is in jeopardy unless this softening moment of male self-disclosure occurs by about session 8 of the 12 therapy sessions--a standard length for this therapeutic intervention.

Complexities of Emotional Self-Disclosure

The complexities of emotional self-disclosure have attracted a great deal of interest, particularly in the communications literature, over the last 30 years. Conceptually, ESD can be viewed through the lens of the theory on socially constructed reality (Berger & Luckmann, 1966) in that it stems from an attempt to reach out to others around us and through communication to make sense of what we observe is happening around us and influencing us. As pointed out by Weick (1995), this process is particularly important in organizations because of the need for the organization's employees to make sense of what is happening within the organization.

In a broad sense, the appropriateness of ESD is determined by socially constructed rules that can be thought of as providing key aspects of the culture in an organization (Schein, 1992). Emotions are often seen by psychologists through the lens provided by Freud and are viewed as having profound influence on human behavior (Izard, 1977). As part of an exploration of emotional expression and as a result of her research on what factors influence ESD, Petronio (2002) identified culture, gender, context, and individual motivation as key variables. Particularly in the communications field, the research interest has focused on the process of self-disclosure as well as its utility and on how self-disclosure on the part of others is elicited. In examining the process of ESD, scholars have examined the phenomenon of reciprocity in self-disclosure and have noted that, particularly in longer term relationships, the partners tend to take turns with self-disclosure over a period of time rather than feel the need for a strict and immediate disclosure interchange that involves the self-disclosure of both parties (Dindia, 1988; Hill & Stull, 1982; Vangelisti & Banski, 1993; Weber & Carter, 1998). There is a complex relationship between trust and ESD. Trust and ESD tend to develop together gradually over a period of time in terms of frequency, depth, and the number of topics covered (Jacobs et al., 2001).

In the literature on self-disclosure, there is an acknowledgement of the risks involved and the individual's use of a conscious or unconscious risk-to-benefit calculus during the process of disclosing (Petronio, 2002). Some authors have explored one

aspect of this calculus in their article and find that women may employ ESD as part of a strategy of manipulation (Brown & Guy, 1983). In his research, Rosenfeld (2000) also discusses the informal risk-to-benefit calculus that is inherent in the process of deciding to emotionally self-disclose. Although the discussion of risk might lead to a broader discussion of the trust required for ESD to occur, Rosenfeld chooses to focus his chapter on ESD in itself rather than delve into a discussion of some of the elements, such as trust, that are essential if ESD is to occur between two people (Rosenfeld, 2000).

Chelune (1979) comments on some of the complex variables that influence the willingness to engage in ESD, including the attractiveness of the target of the disclosure, the target's age, and the mental models derived from family experience that could influence both the person disclosing and the target of the disclosure. In exploring the differences in ESD between men and women, several authors have found that this is a complex area that defies the stereotypic generalization that women tend to engage in ESD more than men (Dindia & Allen, 1992; Forbes & Roger, 1999; Parker & Parrott, 1995; Snell, Miller, Belk, Garcia-Falconi, & Hernandez-Sanchez, 1989). ESD can also be examined from the perspective that self-presentation can be viewed as a personal marketing effort (Johnson, 1981).

Other authors have examined the topic of eliciting ESD by others, noting that using humor, being cheerful, indicating acceptance of the other party, and showing personal warmth all act to encourage ESD (Colvin & Longueuil, 2001; Devencenzi & Pendergast, 1999). Situational factors can also play a role in ESD. For example, individuals may disclose more about sensitive topics such as drinking habits when interacting with a computer rather than with human interviewers (Locke & Gilbert, 1995).

Better Understanding of Adult Attachment, ESD, and Trust Is Needed

A more complete understanding of attachment and disclosiveness that can be viewed as a general form of ESD may help us arrive at a better understanding of trust in organizations and may even provide key insights into how individuals learn or refuse to learn in organizations. There has been a substantial interest in trust, particularly within the last 15 years, and substantial literature has been developed in addition to the work of

Bowlby and Erikson.

Authors from different disciplines have tended to view trust in very different ways, and several theories about trust have been advanced that have provided a richness of views. In the leadership literature, Barnard (1962) asserts that one of the fundamental responsibilities of the leaders in any organization is to encourage cooperation among employees and groups within the organization so that the organization can grow and survive. Several authors have recently emphasized the economic benefits of trust. Hwang and Burgers (1997) connect cooperation in organizations to exchange benefits and emphasize that humans are driven by self-interest and their desire to achieve mutual gain. Lewicki and Bunker (1996) note the increasing interest in trust as organizations move toward increasing reliance on teams and trust that is rooted in confident expectations of the actions of team members.

Consistent with the views of Hwang and Burgers, Boss (1978) asserts that trust is crucial for managerial problem solving. Sheppard (1998) cautions that laying off employees may be a breach of the psychological contract with the employees and may severely damage their trust in the organization for which they work. Viewing trust from an economic perspective, Wicks and other authors argue that organizations should view trust as an economic asset, and they encourage organizations to adopt a strategy for investing in trust based upon criteria consistent with attaining good return on investment (Wicks et al., 1999).

From the knowledge management perspective, Davenport and Pruzak (1998) view trust as essential if knowledge management initiatives in organizations are to succeed. The absence of trust tends to close down the informal networking and the sharing of information and ideas that are crucial for knowledge management initiatives and continuous learning (Davenport & Prusak, 1998; Senge, 1990; Vaill, 1991). Unfortunately, the scholars studying organizational trust have not yet explored the connections between adult attachment, disclosiveness, and organizational trust.

Conclusion

Trust is multifaceted and complex. While it may be more accurate (Weick, 1995) to think of trust and distrust as separate variables rather than as opposite extremes of the

same variable (Lewicki et al., 1998), this process demands our time and our understanding and enough energy to engage in complex thought. Much of the literature on trust reflects an assumption that trust and distrust are really opposite extremes of a single variable because seeing them in this context is consistent with the limits of individuals' rationality and their propensity to settle for proximate rather than completely accurate solutions (Simon, 1976; Weick, 1979). Lewicki and other authors have argued that trust and distrust are separate variables (Kurstedt, 2002, 2003; Lewicki et al., 1998; Weidner II, 1997). However, trust and distrust may indeed be so heavily correlated with each other that they are not separate variables. A quantitative empirical study may be necessary to clarify this issue(Cross & Belli, 2004); however, resolution of this issue is beyond the scope of this study.

Despite the high level of interest in organizational trust, there has been little quantitative empirical work done to date that helps to illuminate the nexus between trust and distrust and the connection between trust and organizational productivity, although the nexus of trust to productivity is assumed by many authors (Davenport & Prusak, 1998; Reina & Reina, 1999; Shaw, 1997; Zand, 1997). Additional research in this area might help to clarify the benefits of elevating levels of trust in an organization. Empirical work is sometimes quite useful in resolving contentious issues in the social sciences(Cross & Belli, 2004), and this study will focus on exploring the antecedents of organizational trust, an essential first step toward a better understanding of how trust functions in organizations.

Bowlby states that a child's attachment to a significant caregiver (usually the mother) is crucial for the child to develop trust and that the propensity to trust learned during childhood substantially influences a person's lifetime relationships. In family therapy, attachment theory is often associated with therapy, including EFT, provided to couples that have distressed relationships. The therapist's grasp of attachment theory can provide a basis for understanding the distress experienced by the couple as well as a basis for providing beneficial therapy (Johnson et al., 2001).

Erikson (1997), in his stages of human development extending from childhood through adulthood, sees the need to develop trust and avoid distrust as the first

developmental hurdle facing the individual. Bowlby focuses on attachment as a prerequisite for secure relationships later in life. Erickson uses slightly different terminology, but his message is the same: Normal human development is based on the ability to trust, and individuals who fail to develop trusting relationships must learn to trust or their personal development will be stunted and their relationships will be marked by ambivalence and pain.

Based on the work of Erikson and Bowlby, we know that the capacity to trust is very important for individual development of satisfying relationships that nurture personal growth. Additionally, based on the work of Chelune (1979) and other authors, we know that ESD facilitates bonding between individuals by helping people to build friendships and that the willingness to self-disclose is based on a feeling of trust in the target of the self-disclosure (Chelune, 1979; Petronio, 2000; Pistole, 1993). Self-disclosure in relationships tends to occur progressively over time and helps individuals to form friendships and intimate relationships based in part on the process of sharing personal and sensitive information with each other in progressive steps that could be viewed as a part of a bonding or attachment process. Furthermore, individuals choose as targets or recipients of their ESD other individuals whom they trust not to hurt them, either through critique or through the careless release of the shared information that is personal and sensitive. Because of its more general nature, however, an instrument for measuring disclosiveness may be more useful for exploring organizational trust.

Trust is also crucial for the sharing of information and networking in the workplace and is one of the keys for individual learning as well as for organizational learning (Kurstedt, 2002; Reina & Reina, 1999; Senge, 1990; Zand, 1972). However, we have an incomplete understanding of the nexus between adult attachment, disclosiveness, and organizational trust.

There are real consequences to our limited understanding. Attachment-based distress between individuals in an intimate relationship is viewed as a personal problem that may require therapy. However, closing the gap in our understanding of how attachment and disclosiveness influence an individual's trust in the workplace is a responsibility of organizations.

Based on the work of several authors, we know that trust is crucial for individual learning, the sharing of information, and the development of productive team relationships (Davenport & Prusak, 1998; Kurstedt, 2002; Lewicki et al., 1998; Reina & Reina, 1999; Senge, 1990). At least on an intuitive level, there appears to be a connection between these constructs of adult attachment, disclosiveness, and organizational trust. However, in the literature, the discussion appears to have been largely confined to particular academic areas, and few authors have ventured into a broader discussion so that the scholarly community could benefit from a more comprehensive understanding of the connections between these constructs. Additional research is needed to clarify how trust is influenced by adult attachment and disclosiveness.

CHAPTER 3
METHOD
Introduction

This chapter provides a review of the research methods used for this study. The three main constructs that were explored in this study were adult attachment, general disclosiveness (DS) (i.e., disclosure that spans more than one dyadic relationship), and organizational trust. Quantitative research methods were used to explore three research questions. As stated in chapter 1, the main research question focused on what portion of the variance in employee's perceptions of organizational trust could be explained by employees' adult attachment (AA) and DS.

This chapter includes information about the instruments used to conduct this study, demographic questions included in the surveys sent to participants, employee participants in the study, and the procedures used to collect the data from two participating organizations. The chapter also provides information on the preliminary and main analyses performed using the data collected in order to answer the research questions. I planned to explore the relationships among the three constructs using statistical techniques, including correlation analysis, factor analysis, t-test, ANOVA, and multiple regression.

Instruments

Three main instruments and items from two other instruments were used in order to explore the research questions. All of the instruments were selected based on their strong theoretical base, their pertinence to the research questions, and their demonstrated validity and reliability. In addition, six demographic questions were included in the survey used for this study. Appendix A contains the survey used for this research that combined the instruments and demographic questions. An information memorandum and informed consent statement sent to participants are also in Appendix A.

Organizational Trust

Scott (1981) noted that there is a substantial interest in organizational trust because trust influences problem solving and creativity in organizations and trust

contributes to overall organizational effectiveness and productivity. Scott also stated that elevated levels of trust reduced the number of external controls required to regulate the behavior of employees. The need to impose fewer external controls allows an organization to apply the resources that might have been spent on control mechanisms to other activities consistent with the strategic goals of the organization (Creed & Miles, 1996).

Scott also noted that there were few valid and reliable instruments available for measuring trust, and he therefore developed items and subscales that he used as a consultant for a large metropolitan transportation department that was interested in increasing its levels of organizational trust. Scott focused his items on key interpersonal relationships within an organization. In order to measure trust, he initially developed 29 items for his instrument. These items focused on trust in peers, supervisors, upper-level management, and the consultant employed for the organizational intervention (Scott, 1981). Scott's instrument has been used recently by another author in a dissertation focusing on role breadth self-efficacy of employees in organizations (Ruder, 2003). He used two of Scott's subscales, trust in supervisors and trust in upper-level management.

Scott started with 29 items for measuring organizational trust. He then used factor analysis with orthogonal rotation and reduced the number of items in his instrument to 17. All of these items were based on a 5-point Likert scale, with 1 = strongly agree and 5 = strongly disagree. Scott made his final determinations regarding the retention of items for his instrument based on the results of orthogonal rotation and also on a review of each item's content by four evaluators who were familiar with organizational trust literature and organizational behavior.

As a result of his analyses, Scott developed five items that measure trust in the immediate supervisor, four items that measure the overall trust in upper-level management of the organization, and four items that measure trust in peers. He reported eigenvalues greater than 1.0 for each of these subscales (Scott, 1981). A fourth subscale of Scott's instrument, designed to measure trust in a consultant, was not pertinent to this study and was not used.

Scott confirmed, using factor analysis, that his items loaded to the anticipated

factors and concluded that the measures developed were consistent with his conceptual framework of organizational trust and that they were also internally consistent (Scott, 1981). Scott did not provide reliability scores for his subscales or his complete instrument. However, Scott's measures for trust in the supervisor as well as trust in upper-level management were recently used in a doctoral dissertation (Ruder, 2003). Ruder reported alpha scores for trust in upper-level management and trust in supervisors as .71 and .93, respectively. Ruder also found, as a result of a factor analysis, that the two factors that measured trust in supervisors and upper-level management had eigenvalues of 1.0 or greater.

Because Scott's instrument had not been used to measure overall organizational trust, I considered supplementing his instrument with an instrument developed by Cummings and Bromiley (1996). However, their instrument focused on measuring trust between departments of an organization and was not consistent with the thrust of my research questions, which focused on overall trust within an organization. After searching for a suitable instrument or a subscale that would be reliable and valid to answer my research questions, I decided to use items developed by authors that focused on employees' overall perceptions of trust within their organizations (Daley, 1991; Nyhan & Marlowe, 1997). Items 14 and 15 in Part A of the survey (Appendix A) were taken from Daley (1991), who reported a reliability of .68 for his subscale. The remaining items (items 16 and 17 in Part A of the survey) were taken from Nyhan et al. (1997) and adapted to conform to the 1 to 5 Likert scales used by Scott. These last two items were chosen because they complemented the trust items developed by Scott that were already included in the survey. No reliability information was available on these items. Tables 4.5 and 4.6 present reliability results for all subscales used in this research.

Adult Attachment

Bartholomew and Horowitz (1991) developed a model shown in Table 2.2 of this dissertation that provides a framework for examining attachment based on a view of self and another person. However, the instrument subsequently developed by Bartholomew and Horowitz to accompany their model has been shown to have unacceptably low alpha scores (<. 5), indicating that it is not a reliable instrument (Backstrom & Holmes, 2001).

As a result of my search for a valid and reliable instrument for measuring adult attachment in an organizational setting, I chose an instrument developed by Becker et al. that builds on the research of Bartholomew and Horowitz by combining two of their categories, fearful and dismissive, into a single category described as fearful. The Becker et al. instrument has been shown to be reliable and valid.

The instrument developed by Becker et al. (1997) could be used to measure adult attachment in nonromantic relationships and was appropriate for use in organizational settings. The instrument has 19 items (Becker, Billings, Eveleth, & Gilbert, 1997) and is based on the work of authors such as Ainsworth, Hazan, Bartholomew, and Collins. In developing their instrument, Becker et al. used 22 items from other authors and added 3 new items. Becker et al. used factor analysis to check how the items loaded and identified three factors: preoccupied, fearful, and secure.

Becker et al. then checked the instrument by developing a survey that they sent to 1,803 members of a graduating class from a large midwestern university. Becker et al. obtained 1,217 responses that they used for their analysis. They checked the factor loadings using confirmatory factor analysis for all items and excluded four items because they either cross-loaded or did not contribute to the internal consistency of the particular factor. Final decisions on retaining items for the instrument were based on statistical analyses and the judgment of subject matter experts. Becker et al. then checked the convergent validity of their instrument by examining the correlations between their factors and factors that had been developed by other authors and concluded that their instrument demonstrated convergent validity.

Becker et al. (1997) checked the relationships between their factors and reported the following correlations: fearful and secure (r = - .63), secure and preoccupied (r = .37), and fearful and preoccupied (r = .24). They noted the fairly strong negative correlation between the fearful and secure factors and confirmed with LISREL that a three-factor structure fit the data better than a two-factor structure (Chi Square for three factors = 571.70 and Chi Square for two factors = 816.55) (p. 490).

As a result of their initial study, Becker et al. reported the following alpha scores for the three factors of their instrument: preoccupied, .84; fearful, .81; and secure, .80.

They then used their instrument to conduct a second study focusing on attachment and personality types that used responses from 545 graduates from a large midwestern university. As a result of this second study, they reported the following alpha scores for the three factors of their instrument: preoccupied, .82; fearful, .80; and secure, .81. These alpha scores were quite consistent with the first set of alpha scores developed for the instrument.

Disclosiveness (DS)

Wheeless worked with another researcher, Grotz, and developed measures for self-disclosure (Wheeless, 1976, 1978; Wheeless & Grotz, 1976, 1977). Wheeless (1978) also developed an instrument for measuring self-disclosure by an individual and a companion instrument for measuring DS, or willingness of an individual to disclose to people in general. My research focused on organizational trust that is expressed in three key organizational relationships, namely, trust in supervisors, trust in peers, and trust in upper-level management (Scott, 1981). I therefore decided to use the instrument developed by Wheeless that measures DS rather than his instrument for measuring disclosure in a single dyadic relationship. The DS instrument developed by Wheeless contains 30 items linked to 5 factors for DS that measure intent, amount, positiveness, depth, and honesty.

Wheeless used responses from 385 students enrolled in a course in interpersonal communications at West Virginia University to continue the development of his scale on DS. Responses to the items were based on a 7-point Likert scale, with 1 = strongly disagree and 7 = strongly agree. Items in the instrument all loaded cleanly except for a single item for intent, which Wheeless excluded from his analysis. Reliability scores for his five factors ranged from .65 to .90. Only the reliability for "intent" was less than .70, and Wheeless stated that these findings basically replicated his prior research findings. He developed a correlation matrix for the five factors included in the DS instrument that showed that the strongest correlation between the five factors of the DS instrument was .26, a relatively weak correlation. Wheeless concluded that the DS instrument was valid and reliable.

The alpha scores obtained by Wheeless are similar to alpha scores obtained by

other researchers who have used his instrument. In a study of the verbal aggressiveness and communication styles of individuals selected for jury duty, another author reported alpha scores for the Wheeless subscale on positive disclosiveness of .80, .81, and .75 in three separate studies (Wigley, 1999). Another researcher used the complete DS instrument developed by Wheeless for a study of Asian students (Chen, 1993). Chen reported alpha scores for the five DS factors ranging from .69 to .86, although he did not specify the scores for each factor. Table 3.1 identifies the subscales, number of items, and reliability for each instrument used in this research.

Table 3.1 **Summary of Instruments Used for This Study**

Instrument	Subscales	Number of Items	Reliability
Adult Attachment (Becker et al., 1997)	1. Secure 2. Preoccupied 3. Fearful	7 6 6	.80 .84 .81
Disclosiveness (Wheeless, 1978)	1. Intent 2. Amount 3. Positiveness 4. Depth 5. Honesty	3 7 7 5 8	.65 .82 .90 .78 .84
Organizational Trust (Scott, 1981)	1. Trust in Supervisor 2. Trust in Peers 3. Trust in Upper Management	5 4 4	.93 * ** .71*
Organizational Trust (Daley, (1991)	Organizational Trust	2	.68
Organizational Trust (Nyhan, et al., 1997)	Organizational Trust	2	**

*Alpha scores reported by Ruder (2003). Scott's article does not provide alpha scores for his subscales. Alpha scores were developed for all the subscales during this research (Tables 4.5 and 4.6)
** Not available.

Demographic Information

In addition to the items from the instruments, I included six demographic questions in each survey in order to determine whether demographic factors might have an influence on organizational trust. The six demographic items are the participant's number of years employed by the organization, number of years with the supervisor, age,

sex, type of position at work, and educational level (see Part D of the survey in Appendix A). I did not expect any of these demographic factors to have a statistically significant influence on organizational trust. Nevertheless, I wanted to control for any influence these factors had in the regressions used for the main analyses before answering the research questions for this study.

Participants

The participants for this study were drawn from two Washington, D.C., metropolitan area organizations. Consistent with the literature, I thought that these organizations might have different organizational cultures or other contextual factors that could influence their levels of organizational trust (Schein, 1990, 1996b). In order to correctly identify the organization of each participant, I used color-coded survey forms for the two organizations that allowed me to easily track the company affiliation of each participant. The participants consisted of approximately equal numbers from a nonprofit trade association and a large construction company specializing in the construction of homes and major office buildings. By analyzing the data for each organization, I wanted to see if the cultures or contextual factors of these two organizations might be associated with statistically significant differences in trust for their participants.

The survey questionnaires were distributed to about 180 employees at a trade association (identified as Company 1). This trade association had about 330 full-time employees at its Washington headquarters and provides a wide range of services to its members, including trade information and trade shows, as well as lobbying representation on issues of interest to association members with the U. S. Congress and the White House. The participants of the second organization used for the study were from the Washington office of a major construction company (identified as Company 2). The Washington office of Company 2 had about 220 employees. Surveys were sent to all employees of this company in order to obtain roughly equal numbers of participants from each company.

Procedures

Both Company 1 and Company 2 decided to use the mail version of the survey and the accompanying consent form that explained to participants how their confidentiality would be protected (see Appendix A). The chief executive officer (CEO) for each company sent an e-mail message to the employees that contained a general explanation of the purpose of the research and expressed the CEO's support for the research. I provided survey packets for each company that contained a memorandum from me with additional information about the research survey and a consent form approved by the Virginia Tech Institutional Review Board (IRB). The consent form explained that participation in the research was voluntary and that the identity of participants would be kept confidential. Participants were asked to mail the completed survey form and signed consent form to Virginia Tech in a stamped and preaddressed envelope that was included in each packet. An additional copy of the consent form was provided for the records of each participant.

Upon receipt, I immediately separated the consent forms from the survey forms and filed each separately. A three-digit number was used to identify each survey form. No names were entered in the computer file. I retained the original copies of all the consent forms and surveys in the files at my residence. Only aggregated data regarding the results of the survey were provided to respondents and management officials at the organization that employed the respondents.

Research Questions

Preliminary Analyses

I used SPSS 10 to analyze the responses to the surveys. Before entering the responses from each survey into my database, I checked each survey for completeness, variability in answers to the items, and comments provided. My initial analysis of the surveys was to confirm that the data were correctly entered into SPSS and that the reverse scoring of items was done correctly. I also planned to confirm that the scoring for the subscales was done correctly and checked the data for outliers and skew. In addition, I planned to develop descriptive statistics and examined the relationships between the

demographic characteristics of the respondents and organizational trust. I wanted to explore the pair-wise Pearson correlations between four demographic factors that were metric (i.e., age, the years with the organization, the years with the supervisor, and the level of education) with the subscales of organizational trust developed by Scott (1981) to see if any of these demographic items had a statistically significant influence on organizational trust. Because sex, position in the workplace, and education level are categorical variables, I intended to use ANOVA analyses to see if either of these categorical variables had a statistically significant relationship with the subscales of organizational trust.

I wanted to compare the two companies from which participants were drawn using independent t-tests in order to determine if there were statistically significant differences in the levels of trust across the organizations. I also planned to examine the correlation patterns for the other three metric variables to determine if they were similar across organizations. Based on the outcome of these analyses, I planned to determine if I needed to treat the organizations separately in my analyses or whether I could collapse the data into one large sample for my analyses.

The research questions focus on understanding the influence of DS and adult attachment on organizational trust. Other organizational characteristics, such as factors normally considered to be part of an organization's culture (e.g., rules, values, and standard practices), may also influence organizational trust (Schein, 1999). Authors such as Shaw, Reina, Kurstedt, and Zand have also stated that the behavior of top managers in an organization has a substantial influence on whether employees perceive the organization as generally trustworthy or not (Kurstedt, 2003; Reina & Reina, 1999; Shaw, 1997; Zand, 1997). However, a review of the cultural variables and managerial behaviors that might have influenced organizational trust is outside the scope of this research study.

I planned to continue my preliminary analyses by assessing the reliability of the subscales that were used for the study by developing Cronbach's alphas for the subscales of the three instruments of Scott, Wheeless, and Becker et al. as well as the subscales of Daley and Nyhan et al. I then planned to develop a pair-wise correlation table that

showed the correlations between all the subscales for the instruments used to see if the correlations were .6 or above. Subscale correlations of .6 or greater might indicate that I might have multicollinearity problems (Allison, 1999) with the hierarchical multiple regressions used for the main analyses that focused on the research questions.

Main Analyses

For each of the regressions used for the analyses, I planned to enter adult attachment (AA) and disclosiveness (DS) in order to understand the influence of these variables on organizational trust. Before running each of the regressions, I wanted to partial out the influence of organizational and demographic variables. In order to do this, I planned to use the following order for entering the variables into the regression. I would enter in step 1 "organization" as a variable if there was a statistically significant difference in the organizational trust levels of the two companies. In step 2 of each regression, I would enter any demographic characteristics that showed a statistically significant influence on organizational trust. Because the purpose of the first two steps was to partial out from the findings the influence of factors that had a statistically significant influence on organizational trust, steps 1 and 2 could be combined or omitted depending on the findings of the preliminary analysis.

After entering the organizational and demographic variables in steps 1 and 2 of each regression, I planned to enter the variables that were the focus of this study, adult attachment, and DS. By entering the adult attachment (AA) subscales in step 3 of the regressions for research question 1, I wanted to see if adult attachment rather than disclosiveness would explain a greater portion of the variance in organizational trust.

Research Question 1

1. What portion of the variance in employee's perceptions of organizational trust is explained by an employee's disclosiveness *(DS)* after controlling for adult attachment (AA)?

Adult attachment, based on the literature, was expected to have the greatest influence on organizational trust (Ainsworth, 1989; Bartholomew, 1990; Bowlby, 1988; Mikulincer & Nachshon, 1991). By examining the results from the regressions, I hoped to be able to see what the betas and R square changes were for the factors of adult

attachment (AA) and DS and compare the overall influence of these two factors on organizational trust (OT). Based on the literature, I found that adult attachment for individuals was expected to have a stronger influence on trust than DS because AA is based on a mental model brought forward from childhood and because AA has both a direct influence on OT and an indirect influence on OT through DS.

Research Question 2

The second research question would reverse the sequence for entering adult attachment and disclosiveness into the regressions so that the influence of the two constructs on organizational trust could be more fully explored.

2. What portion of the variance in an employee's perceptions of organizational trust is explained by an employee's ***adult attachment*** after controlling for DS?

In the final step of the regression, I planned to enter adult attachment because, based on the literature, it was expected to have the greatest influence on organizational trust (Ainsworth, 1989; Bartholomew, 1990; Bowlby, 1988; Mikulincer & Nachshon, 1991).

By entering AA in the final step of the regressions, I would be able to see more clearly if AA explained a portion of the variance in OT above and beyond the variance explained by DS. A review of the literature suggested that adult attachment directly influences an individual's propensity to trust in an organization and also indirectly influences organizational trust through an individual's propensity to engage in DS. On the other hand, DS has a spiral, or reciprocal, relationship with trust (Chelune, 1979; Jacobs et al., 2001; Petronio, 2002; Wheeless, 1978; Wheeless & Grotz, 1977). I did not expect the DS subscales to have as strong an influence on organizational trust as the AA subscales.

Research Question 3

It was assumed for research question 3 that adult attachment would explain more of the variance in organizational trust. Therefore, in order to further explore the relationships between aspects of adult attachment and organizational trust, research question 3 was based on a series of regressions. I planned to explore each of the three attachment subscales for the amount of variance that it explained in the factors of

organizational trust.

For each of the regressions, I planned to first enter DS if these subscales were statistically significant in order to explore the relationships between the AA and OT subscales. I expected to run a series of regressions to complete this analysis if the two organizations did not have different trust levels that were statistically significant. If there was no statistically significant difference in the trust levels of the two companies, I could combine the data from their respective participants into a single file for my analyses.

3. What portion of the variance in an employee's perceptions of each of the three factors of organizational trust is explained by the **three attachment subscales**?

Consistent with the literature, individuals who have a secure attachment are expected to have higher DS scores than those who are avoidant (Collins & Read, 1990; Mikulincer & Nachshon, 1991; Pistole, 1993). Securely attached adults are better able to disclose appropriately in a way that contributes to bonding with another individual and also provides comfort (Pistole, 1993). This capacity to appropriately disclose helps individuals build bonds of trust with others in the workplace.

Secure individuals are expected to have higher overall OT scores than individuals who are fearful or preoccupied (Ainsworth, 1989; Bartholomew, 1990; Bowlby, 1988; Duffy et al., 2001; Hazan & Shaver, 1990; Mikulincer & Nachshon, 1991). Fearful individuals tend to distrust others and disclose to others in order to avoid injury. They tend to have a positive view of self and a negative view of others that conveys an impression of arrogance and diminishes the chances for these individuals to establish trusting relationships. Preoccupied individuals often have a negative view of self and a positive view of others and tend to dependently cling to others in a way that is often perceived by others as overly demanding (Bartholomew, 1990). Preoccupied individuals tend to be more disclosive than fearful individuals, but their basic insecurity impedes their development of trusting relationships (Chelune, 1979; Derlega et al., 1993; Jacobs et al., 2001; Mikulincer & Nachshon, 1991). Because human beings are complex, each of the participants was expected to have some of the characteristics of each of the adult attachment styles.

Conclusion

This chapter provided information describing how the instruments used in the research were developed as well as their validity and reliability. Table 3.1 summarizes the instruments and the subscales used to conduct this study, including the number of items and the reliabilities for each of the subscales. The chapter provided information on the participants in the study and the companies for which they worked. In addition, the chapter described how the data were collected and the confidentiality provided to the participants. The chapter also described the plans to analyze the data collected from employees at two companies.

The chapter included a review of the preliminary analyses that were planned to review the reliability of the instruments and test for the possible influence of demographic variables on the levels of trust in the companies as well as whether there were differences in the trust levels between the companies. The main analyses focused on the three constructs examined in this study, namely, adult attachment (AA), disclosiveness (DS), and organizational trust (OT). The three research questions were designed to explore the amount of variance in the employees' perceptions of organizational trust that could be explained by employees' AA and DS. Because the participants' attachment styles were expected to have a stronger influence than disclosiveness on organizational trust, research question 3 was designed to explore the influence of the three attachment subscales on each of the subscales of organizational trust.

CHAPTER 4

RESEARCH FINDINGS

The purpose of this study was to investigate the relationships among three major constructs: disclosiveness (DS), adult attachment (AA), and perceived organizational trust (OT). In this chapter are presented a description of the sample, results of preliminary analyses, a description of a revised instrument to measure organizational trust, and answers to the research questions posed in chapter 3.

As a result of completing the analyses to answer the research questions, I found that adult attachment styles explained a substantially greater portion of the variance in organizational trust than the DS subscales. As expected, none of the demographic variables had a statistically significant relationship to organizational trust. Consistent with the literature, attachment style and, in particular, fearful attachment was statistically significant and explained a moderate amount of the variance in organizational trust.

Description of the Participants

The participants worked for two companies in the Washington, D.C., metropolitan area. In order to preserve the confidentiality of the companies and the participants in the study, the companies will be referred to as Company 1 and Company 2. Company 1 is a trade association with about 350 full-time employees and Company 2 is a construction company with about 220 full-time employees.

Surveys were sent to 180 of the 350 employees in Company 1 in order to get a representative sample from the company. Surveys were sent to all 40 senior managers, to 80 professionals randomly selected from the 220 professionals, and to 60 administrative staff randomly selected from the 90 administrative staff members. Surveys were sent to all 220 employees in Company 2. In each company, the administrative staff performed clerical and office functions, and the senior managers set policy and made major decisions.

Survey Response Rates

There was a slightly higher response rate for Company 1 (62%) than there was for Company 2 (54%). Table 4.1 shows the response rates by position category for each

company. In Company 1, professionals had the highest response rate (75%), while in Company 2, the administrative group did (70%).

Table 4.1 **Survey Response Rates by Position Category***

Organization	Admin.	Professional	Sr. Mgmt.	Total
Company 1: Sent	60	80	40	180
Returned	35	60	17	112
Response Rate	58%	75%	43%	62%
Company 2: Sent	30	150	40*	220
Returned	21	41	56*	118
Response Rate	70%	27%*	N/A*	54%

*The survey allowed participants to self-identify their position category. The human resources office for Company 2 identified 40 senior managers at the time of the survey; however, some professionals identified themselves as senior managers on their survey forms.

Demographic Variables

Participants from both organizations were volunteers, and for each company the chief executive officer (CEO) sent an e-mail message to employees encouraging their participation. Employees at each company were asked to place themselves into one of three position categories: administrative, professional, or senior management. Table 4.2 shows the distribution of participants by position, sex, and education level for the two companies.

Table 4.2 **Distribution of Respondents by Position, Sex,**
And Education Level for Each Company

	Company 1 (%)	Company 2 (%)	Total (%)	Chi Square (Sig.)
Position	N=112	N=118	N=230	27.772 (.000)
Admin.	35 (31.3%)	21 (17.8%)	56 (24.3%)	
Prof.	60 (53.5%)	41 (34.7%)	101 (43.9%)	
Sr. Mgmt.	17 (15.2%)	56 (47.5%)	73 (31.7%)	
Sex	N=112	N=118	N=230	26.993 (.000)
Female	70 (62.5%)	35 (29.7%)	105 (45.7%)	
Male	42 (37.5%)	83 (70.3%)	125 (54.3%)	
Education Level	N=115	N=121	N=236	2.620 (.623)
H.S. Completed	7 (6.1%)	5 (4.1%)	12 (5.1%)	
Some College	25 (21.7%)	32 (26.4%)	57 (24.2%)	
BA/BS	63 (54.8%)	70 (57.9%)	133 (56.3%)	
Masters	13 (11.3%)	10 (8.3%)	23 (9.7%)	
Doctor	7 (6.1%)	4 (3.3%)	11 (4.7%)	

Most of the participants from Company 1 came from the administrative (31%) or professional categories (54%), whereas most of the participants from Company 2 consider themselves to be professional (35%) or senior management (48%). There was also a sex difference across the companies with Company 1 having a large percentage of female participants (62.5%), whereas Company 2 had only 30% female participation. There was also a statistically significant difference in the distribution of participants between the companies based on position and sex. The distribution over the categories for education in the two companies was very similar. For each company, over 50% of the participants had bachelor's degrees.

T-tests for the two companies highlighted a difference that was statistically significant between the demographic variables for the two companies as shown in Table 4.3.

Table 4.3 **Comparison of Means Between the Two Companies**

Demographic Variables	Company 1 Mean (Std. Dev.)	Company 2 Mean (Std. Dev.)	t-test (Sig.)*
Age	38.90 (10.70)	39.74 (11.57)	-.555 (.579)
Yrs. With Company	5.46 (5.80)	4.13 (4.36)	**1.985 (.048)**
Yrs. With Supervisor	2.36 (2.84)	2.17 (2.12)	.565 (.573)

*The significance was based on a two-tail test.

In addition to a statistically significant difference between the two companies for position categories (p < .001) and sex (p < .001) as shown in Table 4.2, there was also a statistically significant difference for the number of years spent with the companies (p = .048). For both companies, the age for the majority of participants was 40 or younger. In both companies, over 60% of the participants had spent three years or fewer with their supervisors. Table 4.4 shows a cross tabulation of position by sex for both companies.

Table 4.4 **Cross-Tabulation of Position by Sex**

	Position Category			
Organization	Admin.	Professional	Sr. Mgmt.	Total
Company 1: Sex: Female	32	31	7	70
Male	3	29	10	42
Total	35	60	17	112
Company 2: Sex: Female	16	11	8	35
Male	5	30	48	83
Total	21	41	56	118

For Company 1, a total of 70 females participated in the study, most of whom were administrative or professional. Male participants totaled 42, most of whom were professional. Overall, senior management was underrepresented in the sample, with only 17 participants (10 of whom were male), although all 40 of the employees in this category had been urged by the CEO to participate in the study.

For Company 2, a total of 35 females participated in the study, with most of these participants coming from the administrative category. Male participants numbered 83,

and the bulk of the male participants came from senior management. The concentration of females in administrative positions and males in upper-level management is fairly consistent with the distribution of the sexes in the workplace throughout the United States. And over the entire sample, there was a statistically significant relationship between sex and position (Chi Square = 26.99, p < .001).

Overall, there were sufficient differences in the demographic variables between the companies that were statistically significant such that it appeared necessary to conduct analyses pertaining to the research questions separately by company. This issue if discussed further in the preliminary analysis section of this chapter.

Comments from Participants

I also asked participants to provide any comments they had at the end of the survey form. A summary of the comments from each company is in Appendix B. Overall, the comments provided little insight regarding the trust levels in the companies. Most of the comments were focused on the wording of the items in the instruments used for the survey. Several of the participants indicated that the wording of the items was overly complex or confusing. This issue is further discussed in the conclusion of this chapter.

Trust Differences Between the Companies

The surveys were distributed to employees of the two companies on about November 11, 2003, and completed surveys with the informed consent statements required by the Virginia Tech Institutional Review Board were sent to me by return mail at Virginia Tech. In Company 1, several employees told their managers that they would not participate in the survey if they were required to sign a consent form. I told the company official who contacted me regarding this issue that because an informed consent statement accompanied each survey, I would accept a completed survey as the participant's consent to participate. I interpreted the concern over the consent forms as an indication of relatively low trust for employees in Company 1. There was no controversy about the consent forms in Company 2, although only six participants did not return them with their completed questionnaires.

Trust Differences and the Consent Form

My sense was that there was a difference in the trust levels between the companies, and a t-test analysis confirmed this (t = -5.34, p < .01). In order to further explore the relationship between the levels of trust within the companies and the completion of the consent forms, I developed Table 4.5.

Table 4.5. **Mean Levels of Trust in Relation to Signed Consent Forms**

Consent Statement Signed? N (%)			Mean Trust Level
Company 1:	Yes	73 (65%)	3.52
	No	39 (35%)	3.46
	Total	112	3.50
Company 2:	Yes	112 (95%)	**4.00**
	No	6 (5%)	**3.30**
	Total	118	3.97
Total	Yes	185 (80%)	3.81
	No	45 (20%)	3.44
	Total	230	3.74

Interestingly, for Company 1, there was no appreciable difference in the trust levels of participants who signed the consent forms and those who did not although several employees told their managers that they did not want to participate in the survey if they had to provide a signed consent form. For Company 1 65% of the respondents *did* complete and return the consent form, there was no appreciable difference in trust between them and the 35% who did not. The difference between the groups was not statistically significant (t = .43, p = .67). In contrast, there was a statistically significant difference in the mean levels of trust for the 95% of participants in Company 2 who returned the consent forms (4.00) versus the 5% who did not (3.30) (t = 3.01, p < .01). Although this difference seems dramatic, it should be noted that only six respondents (5%) from Company 2 did not return the consent forms.

Overall, Company 1 had lower levels of trust than Company 2, although both companies had above average trust scores on the Likert scale. Based on my overall experience with the two companies, I thought that the difference between them might be explained by a difference in company cultures that could be traced, in part, to the

differences in leadership styles between the two. I based this conclusion on meetings I held with leaders of both companies prior to and during the survey, memorandums sent to employees of the organizations regarding the survey, and my observations based on attendance at a trade show held by Company 1.

Company 1 had a management philosophy that was very authoritarian and a climate of fear existed in Company 1. Clearly, there were some differences in overall trust between these two companies, and there were at least a select few individuals in the more trusting environment of Company 2 who did not share the trust of the other participants from Company 2.

Differences in Trust Subscales

Table 4.6 shows the differences between the companies across the trust subscales.

Table 4.6 **Mean Trust Levels for the Companies Across the Trust Subscales**

Trust Subscale	Company	Mean	T-test (Sig.)
Ave. of **Supervisor**	Company 1	3.81	
	Company 2	4.10	
	Total	3.96	**-2.670 (.008)**
Ave. of **Peer**	Company 1	3.47	
	Company 2	3.70	
	Total	3.59	**-2.221 (.027)**
Ave. of **Upper Mgmt.**	Company 1	3.24	
	Company 2	4.09	
	Total	3.67	**-8.115 (.000)**

Company 2 had higher trust levels across all three subscales and for all the subscales there was a statistically significant difference between the companies.

Organizational Position in Relation to Trust

Position in the organization might help to explain the differences in trust between the two companies because of the concentration of participants at the administrative level of Company 1 (35) who had the lowest trust level (3.33). Company 2, on the other hand, had a concentration of participants (55) at the senior management level who had the highest trust level for any category in either company (4.01), as shown in Table 4.7.

Table 4.7 **Mean Trust Levels in Organizations by Position**
(Numbers of Employees)

	Administrative	Professional	Senior Mgmt.
Company 1	3.33 (35)	3.62 (57)	3.49 (16)
Company 2	3.90 (20)	3.92 (39)	4.01 (55)

However, a two-way ANOVA analysis showed no interaction of organization with position ($F = .93$, $p = .40$). There was a statistically significant difference for organization ($F = 22.52$, $p < .01$) but not for position ($F = .99$, $p = .37$).

Senior managers, by virtue of their power in an organization (McClelland, 1975) help to shape the organizational culture (Schein, 1992) and are therefore expected to have a relatively strong organizational affiliation which is normally associated with higher trust levels. However, from this analysis, the only statistically significant difference in trust was between companies. This difference may be a result of confounding due to difference in the number of respondents from different positions. Only 16 participants (15%) from Company 1 described themselves as senior managers, but almost half (48%) of the participants from Company 2 did so. Assuming that senior managers are more trusting, their much greater representation in Company 2 may be the reason for the statistically higher trust scores from Company 2. Additionally, the relatively low trust level for senior managers in Company 1 may indicate that they felt relatively powerless in a corporate culture and that this lack of power was beyond their control. It may also indicate a kind of passive resistance to the CEO's encouragement that all senior managers participate in the research and an indication of a relatively low level of trust in the CEO.

Preliminary Analyses

Reliability of Instruments

Cronbach alpha scores were used to check the reliability of the subscales for all instruments. Table 4.8 shows the reliability scores for the subscales of the instruments, including their published scores, where available.

Table 4.8 **Summary Table of Instruments**

Instrument	Subscales	Number of Items	Published Reliability	Reliability for This Study
Adult Attachment (Becker et al., 1997)	Preoccupied Fearful Secure	6 6 7	.84 .81 .80	.74 .75 .75
Disclosiveness (Wheeless, 1978)	Intent Amount Positiveness Depth Honesty	3 7 7 5 8	.65 .82 .90 .78 .84	.84 .81 .82 .81 .79
Organizational Trust (Scott, 1981)	Trust in Supervisor Trust in Peers Trust in Upper Mgmt.	5 4 4	.93 * ** .71*	.91 .89 .75
Organizational Trust (Daley, 1991)	Organizational Trust	2	.68	.73
Organizational Trust (Nyhan, et al., 1997)	Organizational Trust	2	**	.79

* Alpha scores reported by Ruder (2003). Scott's article does not provide alpha scores for his subscales.
** Not available.

The subscales of the instruments used in this research had satisfactory reliability. None of the subscales had an alpha score below .7. In addition to checking the reliability of the subscales, I also checked the reliability scores for the instruments as a whole. The adult attachment subscales had an alpha score of -.63, which is unsatisfactory. The secure attachment subscale was negatively correlated with both fearful and preoccupied attachment. The DS subscales had a low alpha score of .12, and such a score would not be useful. However, for purposes of this research, the reliabilities of the five subscales were satisfactory. In contrast, the reliability for an organizational trust score based on the three subscales developed by Scott (1981) was a satisfactory .70.

Factor Structure of Trust Items

The subscales of the Scott (1981) instrument are focused on key relationships but they have not been used to measure overall trust in an organization. Additionally, no alpha score was available for the reliability of his peer trust subscale and the reliabilities for Scott's subscales on trust in supervisors and upper level management had been

provided by Ruder (2003) and not by Scott, who was the author of the subscales. Furthermore, both Daley (1991) and Nyhan et al. (1997) have two item scales that purportedly measure overall trust.

Table 4.9 shows the correlations between all these trust subscales.

Table 4.9 **Correlations Between Trust Subscales*** (N = 229)

	Super.	Peer	Mgmt.	Daley	Nyhan
Supervisor	1.00				
Peer	.450**	1.00			
Management	.427**	.448**	1.00		
Daley	.359**	.430**	**.662****	1.00	
Nyhan et al.	.480**	**.729****	.538**	.500**	1.00

*The Supervisor, Peer, and Management subscales were drawn from Scott (1981). Two items were drawn from Daley (1991) and two items were drawn from Nyhan et al. (1997).
** The correlation is significant at the p < .01 level (two tailed).

The subscale from Nyhan et al. correlated the strongest with Scott's subscale for peer trust (.73, p < .01), and Daley's subscale correlated the strongest with Scott's management trust subscale (.66, p < .01). This relationship was confirmed through factor analysis.

With a 3-factor solution, both of the Nyhan et al. items loaded with Scott's peer items, while both of Daley's items loaded with Scott's management items (see Appendix C). Three factors provided the best structure, explaining 67% of the variance. Four factors explained 72% of the variance, but only one item from Scott (item 12 on the survey) loaded to the fourth factor. Two factors explained only 56% of the variance.

Revised Trust Subscales

Given the correlation and the factor results, revised subscales scores were constructed as follows:

- The subscale for trust in supervisor was composed of the original 5 items from Scott (alpha = .91),
- The subscale for trust in peers was composed of 4 items from Scott and

two items from Nyhan et al. (new alpha = .91), and

- The subscale for trust in upper-level management was composed of 3 of
  Scott's 4 items (item 12 from his instrument was deleted) and 2 items
  from Daley (new alpha = .87).

As seen in Table 4.10, the revised subscales were more reliable than the original
ones from Scott.

Table 4.10. **Comparison of the Original Scott Instrument on Organizational Trust
and Revised Subscales**

Subscales	Scott (1981)		Revised Scales*	
	N of Items	Reliability	N of Items	Reliability
1. Trust in Supervisor	5	.91	5	**.91**
2. Trust in Peers	4	.89	6	**.91**
3. Trust in Upper Mgmt.	4	.75	5	**.87**

* In addition to items for each of the subscales from Scott (1981), items for trust in peers were adapted
from Nyhan et al. (1997), and trust in upper management items were taken from Daley (1991).

Taken as a group, the 16 items in the revised scale had a reliability of .92, which
was slightly better than the reliability of Scott's 13 items, which had a reliability of .89. I
also tested the correlations between the revised subscales for trust (see the top portion of
Appendix D) and found that none of the trust subscales were excessively correlated with
each other. The strongest correlation was between trust in upper management and trust in
peers (.56), which was below the threshold set by Allison (1999) as indicating possible
problems with multicollinearity if the subscales were used in a multiple regression.

Relationships of Adult Attachment and Disclosiveness to Organizational Trust

The focus of this study was on the relationships between organizational trust,
disclosiveness, and adult attachment as perceived by participants from two companies.
Both overall trust in the companies and subscales scores for trust in supervisors, trust in
peers, and trust in upper-level management were considered.

There was a statistically significant difference in the trust levels between the two
companies as well as for all 3 subscores (see Table 4.6). Because of these differences as
well as the differences between the profiles of the two companies (see Tables 4.1 through

4.4), it was necessary to prepare separate analyses for each organization as well as for the organizations combined in order to formulate accurate and complete answers to the research questions. For research questions 1 and 2, the analyses for the file with the combined companies appeared to distort the results, and the final analyses to answer the research questions were therefore run for the companies separately. However, for research question 3, the analyses for the separate companies did not contribute additional information. Therefore, research question 3 was answered using the combined file for both companies.

Although the literature does not mention a possible relationship between demographic variables and organizational trust, I also tested the demographic variables for each company and the combined file for the two companies to be sure that none of them had a statistically significant influence on trust levels in the companies. These variables were included in the hierarchical multiple regressions used to explore the research questions. As expected, their betas were not statistically significant in the final step of any of the regressions. The demographic variables were therefore excluded from the final analyses to answer the research questions.

Overall, the analyses for the research questions show that fearful attachment had a modest, negative, and statistically significant influence on organizational trust.

Research Question 1

The first research question was, "What portion of the variance in employee's perceptions of organizational trust is explained by employee's **DS** (disclosiveness) after controlling for adult attachment?" In order to answer research question 1 for each company, I entered independent variables in the regressions in the following sequence: AA subscales (preoccupied, fearful, and secure) were entered in step 1, and DS subscales (intent, amount, positiveness, depth and honesty), were entered in step 2. Organizational trust was the dependent variable. The adult attachment styles are presented in Table 4.11 under AA.

Table 4.11 **Company 1: Portion of Variance in OT Explained by DS After Controlling for AA**

Step	R Square	R Sq. Change (Sig.)	Betas by Regression Step		
			Step 1	Step 2	Sig. Step 2
1. AA	.192	.192 (.000)			
Preocc.			-.086	-.060	.613
Fearful			**-.307**	**-.278**	**.025**
Secure			.125	.159	.244
2. DS	.238	.046 (.423)			
Intent				-.024	.834
Amount				.206	.092
Positive				-.019	.872
Depth				-.015	.900
Honesty				.105	.372

When DS was loaded in the regression after AA, the DS subscales were not statistically significant and neither were any of the betas associated with the subscales of DS. Consistent with the literature, DS does not explain much of organizational trust over and above what adult attachment explains. Fearful attachment style was statistically significant and had the strongest beta of any of the subscales used in the analysis.

As shown in Table 4.12, the beta for fearful attachment was statistically significant and negative (beta = -.324, p = .009) for Company 2, indicating that fearful attachment had a modest and negative influence on organizational trust in both companies, as shown in Tables 4.11 and 4.12.

Table 4.12 **Company 2: Portion of Variance in OT Explained by DS After Controlling for AA**

Step	R Square	R Sq. Change (Sig.)	Betas by Regression Step		
			Step 1	Step 2	Sig. Step 2
1. AA	.180	.180 (.000)			
Preocc.			-.165	-.133	.276
Fearful			**-.322**	**-.324**	**.009**
Secure			.006	-.086	.494
2. DS	.241	.061 (.234)			
Intent				.091	.435
Amount				.142	.240
Positive				-.031	.778
Depth				-.188	.170
Honest				.156	.187

Once again, DS was not statistically significant nor were any of its subscales.

Research Question 2

The second research question focused on adult attachment. The question was, "What portion of the variance in organizational trust is explained by *adult attachment* after controlling for DS?" Table 4.13 shows the results for Company 1.

Table 4.13 **Company 1: Portion of Variance in OT Explained by AA After Controlling for DS**

Step	R Square	R Sq. Change (Sig.)	Betas by Regression Step		
			Step 1	Step 2	Sig. Step 2
1. DS	.096	.096 (.116)			
Intent			.010	-.024	.834
Amount			.260	. 206	.092
Positive.			.093	-.019	.872
Depth			-.080	-.015	.900
Honest.			.175	.105	.372
2. AA	.238	.142 (.003)			
Preocc.				-.060	.613
Fearful				**-.278**	**.025**
Secure				.159	.244

Once again, the DS subscales did not have a statistically significant influence on organizational trust and neither did any of the DS subscales. The attachment subscales had a statistically significant influence on organizational trust (R square change = .142, p = .003). Among the attachment subscales, fearful attachment was the only one that was

statistically significant (beta = -.278, p = .025), and it had a modest negative influence on organizational trust. Table 4.14 shows the results for Company 2.

Table 4.14 **Company 2: Portion of Variance in OT Explained by AA After Controlling for DS**

Step	R Square	R Sq. Change (Sig.)	Betas by Regression Step		
			Step 1	Step 2	Sig. Step 2
1. DS	.123	.123 (.035)			
Intent			.122	.091	.435
Amount			.111	.142	.240
Positive.			-.002	-.031	.778
Depth			-.212	-.188	.170
Honest.			.202	.156	.187
2. AA	.241	.118 (.005)			
Preocc.				-.133	.276
Fearful				**-.324**	**.009**
Secure				-.086	.494

The results for Company 2 were quite similar to the results for Company 1 that are shown in Table 4.13. In Company 2, fearful attachment had a modest and negative influence on organizational trust (beta = -.324, p = .009). Once again, the DS subscales as a group were not statistically significant and neither were the betas for any of the DS subscales.

The results for both companies were quite similar in terms of the portion of the variance explained by the attachment styles. Of the attachment styles, fearful attachment was statistically significant and explained a modest portion of the variance in organizational trust. Based on the consistency and the strength of the betas for fearful attachment in the analyses for research questions 1 and 2 (shown in Tables 4.11 through 4.14), I determined that fearful attachment had a modest, statistically significant, and negative influence on organizational trust in the two companies.

Research Question 3

The third research question was originally aimed at exploring the differential relationships between all the attachment and disclosiveness variables and each of the three trust subscales. However, because none of the DS scores showed any relationship to trust, either alone or after controlling for AA, the DS subscales were dropped from

further consideration. Additionally, the remarkable consistency of the regression results for the two companies (see Tables 4.11 through 4.14) suggested that the data might be combined. It appears that none of the earlier concerns about having two populations were warranted. This was confirmed by separate analyses by company.

Influence of Attachment Subscales on the Trust Subscales

The third research question was, "What portion of the variance for each of the three factors of organizational trust is explained by the **three attachment styles**?" The results for each company, despite their overall differences, were quite similar to the results for the combined file. Therefore, the analyses for the individual companies are not shown. In order to explore research question 3, I ran three regressions to test the adult attachment styles (i.e., preoccupied, fearful, and secure) against each of the subscales for trust (e.g., trust in supervisor) for the combined file with both companies.

Table 4.15 shows the results of the analyses for the portion of variance in the trust subscales that is explained by the attachment subscales. The results shown are for both companies.

Table 4.15 **Portion of the Variance in the Trust Subscales Explained by the Attachment Subscales**

Trust Subscale	AA Subscale	R Square (Sig.)	Betas	(Sig.)
Supervisory		.034 (.068)		
	Preocc.		-.122	(.103)
	Fearful		-.064	(.453)
	Secure		.045	(.603)
Peer Trust		.154 (.000)		
	Preocc.		-.115	.098
	Fearful		**-.359**	**.000**
	Secure		-.039	.625
Trust in Upper Mgmt.		.158 (.000)		
	Preocc.		-.029	.678
	Fearful		**-.400**	**.000**
	Secure		-.024	.763

The three AA subscales explained a non-statistically significant 3% of the variance in trust in supervisors. In contrast, they explained 15% of trust in peers and 16% of trust in upper-level management, both of which were statistically significant.

Fearfulness was the only one of the three AA subscales that had statistically significant betas (-.36 for trust in peers and -.40 for trust in upper-level management).

Since the adult attachment styles did not help to explain the trust in supervisors for the two companies, I reflected on my experience in the workplace in order to better understand these relationships. A discussion and further analysis of relationships between employees and supervisors are presented in chapter 5.

As shown in Table 4.15, as a group, the AA subscales explained a modest portion of the variance in trust of peers (.154, $p < .001$). Fearful attachment had a modest and negative influence on peer trust (beta = -.359, $p < .001$). Although preoccupied attachment had a somewhat strong beta (-.115), it was not statistically significant (.098 > .05).

Table 4.15 also shows the results for trust in upper-level management. The attachment subscales as a group explained a modest portion of the variance in trust of upper level management (.158, $p < .001$). Once again, fearful attachment was the only attachment style with a statistically significant beta (-.400, $p < .001$).

These analyses showed that the AA subscales explained a modest amount of the variance in trust of peers and upper-level management in both companies. Among the attachment styles, fearful attachment had a modest, statistically significant, and negative influence on trust. The results of the analyses are consistent with the results for research questions 1 and 2. Of the attachment styles, fearful attachment was statistically significant in explaining the trust in peers as well as trust in upper-level management (Table 4.15).

Summary

Some of the participants in the study expressed frustration with the wording of the items of the instruments that were used for the questionnaire (see Appendix B). Several participants commented that the wording of the questions appeared to be redundant, ambiguous, or confusing. Others felt confused by the questions that were negative and found them difficult to answer. One participant expressed frustration with terms used such as "self-disclosure" and "merge" and stated that these terms were "psychobabble." The responses from participants may indicate the need for additional refinement of the

instruments. This issue is also discussed in chapter 5.

One of the challenges in conducting this research was that Scott's instrument (1981), although it showed considerable promise, had not previously been used to measure organizational trust. As a result of this study, researchers who are interested in analyzing organizational trust now have a revised instrument that is reliable, as shown in Table 4.10.

The focus of this research was on the possible influence of two principal constructs, adult attachment and disclosiveness, on organizational trust. Consistent with the literature and the hypotheses reflected in the research questions, adult attachment was found to have a statistically significant, but rather modest, influence on organizational trust. The analyses conducted to answer research questions 1 and 2 (see Tables 4.11 to 4.14) provide an overview of the influence of AA and DS subscales on organizational trust. By itself, AA explained 19% of the variance in trust in Company 1 and 18% in Company 2 (see Tables 4.11 and 4.12). Fearful attachment, among the attachment styles, had a modest and negative influence on organizational trust in both companies despite differences between the companies in overall levels of organizational trust. Consistent with the literature, adult attachment was an antecedent of organizational trust. Disclosiveness can be viewed as a trait that is influenced by adult attachment (Mikulincer & Nachshon, 1991; Pistole, 1993). However, in this study, DS was only marginally correlated with AA and not at all to organizational trust.

The analyses conducted in order to answer research question 3 revealed that fearful attachment, consistent with the findings for the other research questions, had statistically significant, but fairly small and negative influence on organizational trust. This finding is consistent with literature that asserts that trust is fragile and sensitive to events perceived to be negative (Kurstedt, 2002, 2003). None of the adult attachment styles alone or in combination had a statistically significant influence on trust in supervisors. Although this finding was somewhat surprising, it may reflect the unique relationship between employees and their supervisors and the pressure on both groups to make the relationship work effectively. This issue is discussed in chapter 5.

CHAPTER 5
SUMMARY AND CONCLUSIONS

Organizations often take trust for granted or ignore it, although trust is important for organizational learning and performance (Kurstedt, 2002; Reina & Reina, 1999; Zand, 1972). Organizations must continuously learn if they are to survive, and trust facilitates individual and organizational learning (Senge, 1990). However, many authors either mention the importance of trust, or assume trust is present, and then discuss other topics as if little can be done to better understand the antecedents of trust or to improve trust in an organization (Gilley & Maycunich, 1998; Mayer et al., 1995). In particular, prior to this study, researchers had not explored the influence of adult attachment (AA) and disclosiveness (DS) on organizational trust (OT).

Gilley and Maycunich (1998) urged human resource development (HRD) professionals to play a vital role by helping leaders in their organizations attain strategic goals; however, no research study done previously has focused on how trust in an organization is influenced by AA and DS. There is a need to better understand organizational trust because in today's global economy, an organization's ability to survive may depend in part on individual and organizational learning facilitated by trust.

The focus of this study was on a main research question: "What portion of the variance in employees' perceptions of organizational trust do employees' adult attachment and DS explain?" This question was explored to determine the individual influence of each variable (adult attachment and DS) as well as the influence of each variable on organizational trust after controlling for the other one. The third and final research question was designed to explore the influence of different attachment styles on different aspects of organizational trust. The findings of this study contribute to our understanding of adult attachment and its influence on organizational trust by showing that adult attachment and particularly fearful attachment had a modest and statistically significant influence on organizational trust. By contrast, disclosiveness did not explain a statistically significant portion of the variance in organizational trust (Tables 4.11 to 4.14).

Findings and Discussion

The disclosiveness subscales were found to have no statistically significant influence on organizational trust in any of our analyses (Tables 4.11 to 4.14). By contrast, adult attachment was statistically significant throughout our analyses. Adult attachment by itself explained 18% to 19% of the variance in organizational trust (Tables 4.11 and 4.12) and 12% to 14% over and above DS (Tables 4.13 and 4.14).

The two companies whose employees participated in the research had statistically significant differences in their demographic characteristics (Tables 4.2 and 4.3) as well as in their levels of trust (Table 4.6). Despite these differences, the results of our analyses were remarkably consistent across the two companies, indicating that the findings from this study might be generalized to other organizations.

Disclosiveness

Disclosiveness was not statistically significant in any of our analyses (Tables 4.11 to 4.14). This finding was somewhat surprising. Wheeless (1978) had asserted that disclosiveness is "a trait like quality that is an indicant of generalized trust" (p. 144), and other authors had also used Wheeless' instrument for measuring disclosiveness and found it to be a trait (Chen, 1993; Wigley, 1999). However, Wheeless (1978) found that disclosiveness did not explain a statistically significant portion of the variance in generalized trust beyond what was explained by disclosure. Because disclosiveness is a trait, I had expected that it would explain a portion of the variance in organizational trust.

In the literature, a distinction is drawn between disclosure and disclosiveness. Disclosure is described as a behavior that encompasses the exchange of information between two individuals. Disclosure varies depending on the relationship between the two individuals and the context of their encounter. On the other hand, disclosiveness is viewed as a trait-like predisposition of individuals to generally disclose information, for example, in an organizational setting.

Several authors have explored the relationship between trust and self-disclosure and have found that there is a positive relationship between the two variables (Chelune, 1979; Mikulincer & Nachshon, 1991; Rawlins, 1992). Wheeless (1978) found that

disclosure explained about 23% of the variance in individual trust. In order to measure trust, Wheeless used an instrument developed by Rotter that measured generalized trust between individuals, not trust in an organization (Rotter, 1967).

Upon further reflection, there are five possible reasons why DS was found to be no help in explaining the variance in organizational trust. First, the instrument developed by Wheeless may not be valid for use in an organizational setting. This is the first time that the instrument has been used to measure disclosiveness within a company. Wheeless developed the disclosiveness (DS) instrument using data gathered from students at West Virginia University, and subsequent uses of the instrument by Chen (1993) and Wigley (1999) were not in organizational settings. Chen used the instrument to measure the ability of Asian students who had recently arrived in the U.S. to adjust to the U.S. culture, and Wigley used the instrument to explore the role of disclosiveness in juror selection.

Second, the reliabilities for the subscales of all the instruments used in this study were satisfactory (Table 4.8), and the reliabilities for the DS subscales were all close to .8, which is good. Nevertheless, the reliabilities indicate that the subscales measured the data in this study with some error. Reliabilities above .9 would have been preferable in order to further reduce the error in measuring the data collected for this research.

Third, the wording of the items in the disclosiveness questions may have interfered with the responses to the questions. Several of the comments from participants (Appendix B) asserted that questions used in the survey were redundant, confusing, or otherwise irritating. A revised instrument that focused on specific disclosive activities in an organization, for example, within the last week might have produced more valid and reliable results.

Fourth, the results obtained may be, in part, influenced by the samples that came from the two companies. The samples were of sufficient overall size (over 100 participants for each company), however, senior managers may have been under-represented in Company 1 and over-represented in Company 2 (Table 4.2). It is possible that samples from the companies based on representative participation from their position categories might have produced different results.

Fifth, context may have influenced disclosiveness in a way that is similar to its

influence on disclosure. Given a negative context, individual's trait-like propensity to engage in disclosiveness may have been overcome by a sense of wariness, and prudent individuals might have restrained their propensity to be disclosive in order to reduce their vulnerability.

Although my initial reaction to the findings of this study was to exclude DS from further consideration in studies of organizational trust, upon further reflection, excluding DS may be premature. Wheeless, Wigley and Chen have found DS to be a trait-like quality and the results of this study may reflect the influence the five possible explanations discussed above.

Adult Attachment

Fearful attachment was statistically significant and negative throughout our analyses and explained 13% to 16% of the variance in trust of peers and upper level management in both companies (Table 4.15). I was somewhat surprised that secure and preoccupied attachment styles were not statistically significant for any of the analyses. Based on the literature, I had expected secure attachment to have a positive influence on organizational trust. However, the results of this study may reflect contextual aspects of employees' relationships within their organizations as well as the strong need for security that most employees feel. The need for security is consistent with Maslow's hierarchy of needs (1954) and the results of this study may have reflected the chilling influence that fear brings to organizations (Davenport & Prusak, 1998).

Most employees are very sensitive to fearful emotions that may be evoked as a result of actions by supervisors, peers, or upper-level managers. Organizations are often highly competitive and frequently take actions such as firing employees or moving employees in a way that is contrary to their best interests. It appears to be reasonable that fearful reactions would predominate and would negatively influence trust in an organization. This finding is consistent with the literature on trust and particularly the observation that trust is fragile and sensitive to events that are perceived to be negative (Kurstedt, 2002, 2003).

None of the adult attachment styles alone or in combination had a statistically significant influence on trust in supervisors. This finding was somewhat surprising

because, based on the literature, I had expected that adult attachment would have consistent influence across all of the key relationships in an organization. However, this finding may reflect the unique relationship between employees and their supervisors. In retrospect, it might have been useful to request specific comments from participants regarding their trust of supervisors, peers, and upper-level managers, in addition to their general comments. These comments from participants on the different aspects of trust within their organizations might have provided useful information.

In order to help explain why adult attachment styles might have had so little influence on trust in supervisors relative to trust in peers and trust in upper-level management, I reflected on the literature (Sashkin & Rosenbach, 1998) as well as my experience in the workplace concerning the unique relationship between many employees with their supervisors. The first-line supervisor occupies an important position for employees and has substantial influence on whether employees enjoy their work and generally feel comfortable. Employees who do not trust their supervisors often feel motivated to look for another job with a more compatible supervisor. Supervisors who do not generally enjoy the trust of their employees may experience difficulty in getting work done by their employees and achieving the goals of the organization. Because there is usually pressure in the workplace to meet performance goals, a supervisor who is not able to gain the trust of employees may have trouble meeting production standards and may be encouraged by upper management to find another job.

Contextual factors may also play a role in making the relationships of employees with their supervisors unique. Supervisors often have daily contact with their employees and may establish a professional relationship with them over time that is based on mutual respect and caring. Caring is a key ingredient for trust (Shockley-Zalabak, Ellis, & Winograd, 2000). The relationship between employees and their supervisors may be unique and relatively independent of the influence of adult attachment styles for three reasons: (a) there is pressure on both parties to make the relationship function; (b) there is often daily communication between the parties; and (c) there is often an element of caring that is not found in the relationships with peers or upper-level management. Difficult peers can be endured, and upper-level management can be despised and

distrusted from a distance, but not the supervisor.

Trust and Power

There is a roughly equal power relationship between employees and their peers at work. Employees, based on their attachment styles, are relatively free to trust or distrust their peers. On the other hand, employees often view upper-level management as having the power (McClelland, 1975), for example, to order reorganizations within companies as well as the power to reduce the number of employees through downsizing. Both of these actions can seriously harm the financial stability of employees. Upper-level management is often viewed not only as having far more power than the employees of a company but also as not caring as much as a front-line supervisor with whom the employee often has daily contact and has frequently established a more personal relationship.

Limitations of This Study

This study and its findings were based on the responses of employees from two companies in the Washington metropolitan area. These two companies are not representative of organizations in Washington or anywhere else in the United States. A study that included a university and a Federal government organization might have improved the generalizabilty of the findings. A further limitation of the research was that the analyses depended on honest and complete answers to the survey questions by participants based on their perceptions. The responses given by participants were not verified by any other means, for example, through observation by trained experts.

The comments about the instruments shown in Appendix B indicate that some participants responded negatively to the items in the questionnaire. At least for these participants, the items in the instruments may have impeded their accurate and complete responses to the questions. Furthermore, responses to the questions could have been influenced by recent or salient experiences in the workplace or else where, or participants may have responded to the questions in order to enhance their scores on traits they deemed desirable. Having a measure of social desirability as a control might have improved the clarity of the findings for this study.

The results of this study may also have been limited by the instruments that were used to measure trust, disclosiveness, and adult attachment. The revised subscales for

measuring trust may not measure distrust and an instrument that measured trust and distrust might have provided additional understanding of the two companies. In addition, the instruments developed by Wheeless (1978) and Becker et al. (1997) may need revision before they are used again in an organizational setting. Despite these limitations and the differences in the levels of trust between the two companies, fearful attachment was shown to have a consistently negative and statistically significant influence on organizational trust.

Implications of the Findings for Further Research

Adult attachment explained less than 20% of the variance in organizational trust in this study. We need a deeper understanding of other variables, such as secure and stable relationships with a spouse or significant other at home, that might influence organizational trust. In addition, it might be useful to explore how mental models and socially constructed meaning (Bowlby, 1988; Weick, 1995) may combine with defensiveness (Argyris, 1982) and organizational context and culture (Schein, 1992) to influence organizational learning and the establishment of more trusting organizations.

As shown by this research (Tables 4.11 through 4.15), fearful attachment styles had modest, statistically significant, and negative influence on trust in both companies. In view of the strength and consistency of the findings concerning fear in this study, it may be useful for researchers to explore the influence of other emotions on trust in the workplace.

We did not find an instrument for measuring trust and distrust as separate variables. Such an instrument might be developed based on the model of Lewicki et al (Table 2.1) and might be helpful for better understanding trust and distrust in organizations, if trust and distrust are shown to be separate variables.

Further research may be needed to refine the instruments used in this study for measuring trust, disclosiveness, and adult attachment. Several of the participants in the study commented that the items in the instruments were overly complex, confusing, or unsuitable for use in the workplace (Appendix B). For example, some of the participants found the word "merge" in the adult attachment instrument (Becker et al., 1997) to be strange. In order to reduce the resistance of participants, it might be helpful to revise the

instruments before using them again in an organizational setting.

Revised subscales for measuring organizational trust were developed during this research. This instrument was shown to be reliable and has three factors that focus on key workplace relationships: trust in supervisor, trust in peers, and trust in upper-level management (Table 4.10). Although this revised instrument shows promise, its validity and reliability need to be verified through additional research.

Developing a better understanding of attachment styles and their possible influence on mastery-oriented learning and on performance-oriented learning (Dweck, 1999) might also provide valuable insights for facilitating learning experiences of young people as well as adults. For example, kindergarten through twelfth grade schools might benefit from a better understanding of the possible influence of attachment on learning orientations and trust. This understanding could help teams of teachers and administrators work more effectively in conjunction with parents in order to better educate our children. Unfortunately, an emphasis on goal accomplishment and a culture of competitiveness, as illustrated by Company 1 in this study, can lead to diminished trust levels and reduce organizational teamwork. This, in turn, may undercut desired performance.

Additional research is needed to better understand trust in supervisors. I found that the adult attachment styles did not explain a statistically significant portion of the variance in the trust of supervisors, even though adult attachment was helpful in explaining the variance in trust for peers and upper-level management (Table 4.15). The relationship with a supervisor may be unique and heavily influenced by the needs of both parties to make it work, however, this key workplace relationship needs further study so that we can better understand its underlying dimensions.

Further research is also needed so that we can better understand how trust works in an organization and how effective and efficient interventions can be designed to elevate trust levels and improve teamwork and productivity. Several researchers have asserted this causal connection (Barnard, 1962; Gibb, 1978; Reina & Reina, 1999; Shaw, 1997; Zand, 1997); and their assertions appear to be plausible, however, empirical studies are needed to explore this connection. This research study has helped to highlight the

importance of adult attachment as an antecedent of at least some aspects of organizational trust and has demonstrated, in particular, that fearful attachment undermines trust. Nevertheless, we need to have a fuller understanding of trust and is role in the workplace before we can design interventions that are effective for elevating trust levels in organizations.

We have made initial strides through theory building toward a better understanding of the linkages between trust and productivity. However, additional research is needed to clearly understand the antecedents of organizational trust, cultural and contextual influences on trust, and the nexus between trust, productivity, and profitability for private sector organizations.

Recommendations for Practitioners

When I initially framed this research study around the hypothesis that adult attachment had a significant influence on trust in organizations, some of my colleagues thought that organizations might abuse the findings from the research. My colleagues were concerned that organizations might use the findings to screen applicants for jobs and refuse to hire anyone who did not have a secure adult attachment. The logic behind this argument is that securely attached adults are more likely to trust and that trust probably helps to fuel workplace effectiveness (Reina & Reina, 1999; Shaw, 1997). However, there are four problems with the use of this approach to hiring in the workplace. First, such a hiring approach is questionable on an ethical basis, even if it is legal. Such an approach to hiring would probably have to withstand legal challenge.

Second, it is not easy to correctly categorize people based on the application of an instrument, even if the instrument used is valid and reliable. Although I used the instrument of Becker et al. (1997) for this research, its reliability scores are perhaps too low for a hiring instrument. Furthermore, its validity for this purpose is questionable. Based on the understanding gained during this research, I would not recommend using the instrument for hiring purposes. I used the instrument for an informal pilot study prior to this research. I found that as a rough rule of thumb, participants in my informal study could be placed in categories based on which of their average adult attachment scores was the highest. However, these categories provided no more than an approximation of a

person's attachment style. For example, all of the participants in the pilot study who were securely attached also had scores for preoccupied and fearful attachment, indicating that they did not neatly fit into a single category. Furthermore, in this study, secure attachment did not help to explain organizational trust in any of our analyses. An approach to hiring based on a single attachment score could be highly inaccurate and self-defeating for an organization because employees are complex human beings and do not fit into neat or simple categories.

Third, contextual factors and organizational culture exert important influence on trust levels within organizations. For example, one participant in the informal pilot study had a secure attachment score that was strong in relation to his scores for either fearful or preoccupied attachment. Nevertheless, he scored low on trust in his organization when he responded to the survey questions. He explained in his comments on the survey form that he worked in an untrustworthy work environment and that although he trusted his peers, he did not trust his supervisor or upper-level management.

Practitioners need to focus on building a trusting workplace by encouraging leaders in their organizations to demonstrate by their trustworthy behaviors that they can be trusted. Trust is fragile (Lewis & Weigert, 1985) and not easily restored once it has been broken (Kurstedt, 2002). From an economic perspective (Wicks et al., 1999), organizations need to consider the costs of investing in trust and also be aware of the consequences of distrust that can result from breaching the psychological contract with employees (Sheppard, 1998). There is no easy calculus for making a determination about an investment in trust because individual employees bring their propensity to trust into the workplace that is based, in part, on their attachment styles. For example, trust in an organization may be inadvertently and severely damaged by a leader's decision to save money on a benefit. Employees may perceive such an action as a breach of the psychological contract between employer and employee (Sheppard, 1998).

Most workplaces in the United States today are highly competitive, and employees have learned to be wary (Kramer, 2002). In their research, Shockley et al. (2000) asserted that key trustworthy behaviors were competence, reliability, honest and open communication, caring, and shared values and goals. These behaviors have

intuitive appeal and may provide some guidance for employees in organizations who wish to behave in a way that is considered trustworthy. However, there are some measurement issues that could be raised concerning the Shockley et al. instrument. For example, these behaviors appear to be correlated with each other, and they may not be separate factors. The five behaviors, however, may provide a good place for leaders in organizations to start in changing their personal conduct in the workplace (Sashkin & Rosenbach, 1998). These leadership behaviors may be important for establishing a culture in an organization (Schein, 1999) that is conducive to trust, networking, information sharing, and teamwork (Davenport & Prusak, 1998).

Unfortunately, although organizations frequently state that their leaders exhibit these behaviors, most leaders are more adept at espousing these values than they are at implementing them (Argyris, 1993). In particular, Argyris has correctly pointed out that leaders often behave defensively and in a way that is consistent with their perceived need to protect themselves. This defensiveness can interfere with learning and productivity in organizations.

Lessons Learned From the Research Process

I learned two lessons during the process of conducting this research. First, I learned that data site leaders frequently change their minds about participating in research projects. This change of heart is understandable, although it is distressing to the researcher who is trying to gather data in order to answer research questions. I concluded, after having two Federal organizations decide to withdraw from the research just prior to the data-gathering phase, that the organizations withdrew because they were not convinced that the benefits of participation in the research outweighed the potential downside hazards.

My perception was that both of these organizations were highly risk adverse and that their last-minute refusals to participate were based largely on the desire of leaders to avoid taking a risk that might conceivably expose them to criticism. This observation is consistent with research on the defensiveness of leaders (Argyris, 1982) and the self-protective reactions by employees in bureaucratic organizations (Morgan, 1997). Although I did my best to convince interested organizations of the benefits of

participating in the research and offered to provide them with a briefing on the results as well as a written summary of the findings, these inducements were simply not sufficient for two Federal organizations.

The second lesson I learned was that it is important of operate flexibly when navigating between the requirements of an Institutional Review Board for informed consent of participants and the participants themselves, who may be reluctant to self-identify by signing a consent form (Table 4.5). Within two days of the distribution of the research survey in Company 1, I received an e-mail message from my company contact stating that several employees who had received the survey were not going to participate because they did not want to self-identify by signing the consent form.

On the consent form I had asked participants not only to sign their names but also to print their names so that I could retrieve the correct form easily if there was a question about whether a particular participant had given consent (Appendix A). My immediate concern was to get enough participants so that I could answer my research questions. I also wanted a high response rate so that I could be sufficiently confident that those employees who declined to participate would have provided similar responses to those employees who did participate. I quickly decided to protect my study. I told my contact that I would accept the completed survey as consent to participate and that those individuals who felt uncomfortable signing the consent form did not need to do so.

In Company 1, 35% of the participants refused to sign the consent form (Table 4.5). Ironically, there was not a statistically significant difference between those who signed the consent forms and those who refused to sign. In Company 2, I heard no concerns about the consent form; however, six employees (5% of the participants) did not return them with their completed surveys. In Company 2, there was a statistically significant difference in the organizational trust levels between those participants who signed the consent form and those who did not. I learned that the refusal to sign a consent form was an indication of a lack of trust. Company 1 had a lower mean level of organizational trust than did Company 2 for each position category (Table 4.6).

References

Afifi, W., & Guerrero, L. (1998). Some things are better left unsaid. *Communication Quarterly, 46*(3), 231-249.

Ainsworth, M. (1982). Attachment: Retrospect and prospect. In C. Parkes & J. Sevenson-Hinde (Eds.), *The place of attachment in human behavior*. New York: Basic Books.

Ainsworth, M. (1989). Attachments beyond infancy. *American Psychologist, 44*(4), 709-716.

Ainsworth, M., Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of Attachment*. Hillsdale, NJ: Erlbaum.

Allan, G. (1993). Social structure and relationships. In S. Duck (Ed.), *Social context and relationships* (pp. 1-25). Newbury Park, CA: Sage.

Allison, P. (1999). *Multiple regression: A primer*. Thousand Oaks, CA: Pine Forge Press.

Argyris, C. (1976). Theories of action that inhibit individual learning. *American Psychologist, 31*(9), 638-654.

Argyris, C. (1982). *Reasoning, learning, and action*. San Francisco: Jossey-Bass.

Argyris, C. (1986). Skilled incompetence. *Harvard Business Review*(September-October).

Argyris, C. (1993). *Knowledge for action*. San Francisco: Jossey-Bass.

Backstrom, M., & Holmes, B. (2001). Measuring adult attachment: A construct validation of two self-report instruments. *Scandanavian Journal of Psychology, 42*, 79-86.

Baird, J. (1977). *The dynamics of organizational communication*. New York: Harper & Row.

Barnard, C. (1962). *The functions of the executive*. Cambridge, MA: Harvard University Press.

Barnes, L. (1981). Managing the paradox of organizational trust. *Harvard Business Review, 59*(2), 107-116.

Barney, J., & Hanson, M. (1994). Trustworthiness as a source of competitive advantage. *Strategic Management Journal, 15*, 175-190.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships, 7*, 147-178.

Bartholomew, K., & Horowitz, L. (1991). Attachment styles among young adults: A test of a four category model. *Journal of Personality and Social Psychology, 61*(2), 226-244.

Bavelas, J., Black, A., Chovil, N., & Mullett, J. (1990). *Equivocal communication*. Newbury Park, CA: Sage.

Baxter, L., & Montgomery, B. (1996). *Relating: Dialogues and dialectics*. New York: Guilford.

Baxter, L., & Sahlstein, E. (2000). Some possible directions for future research. In S. Petronio (Ed.), *Balancing the secrets of private disclosures* (pp. 289-300). Mahwah, NJ: Erlbaum.

Becker, T., Billings, R., Eveleth, D., & Gilbert, N. (1997). Validity of scores on three attachment style scales: Exploratory and confirmatory evidence. *Educational and Psychological Measurement, 57*(3), 477-493.

Benson, H. (1979). *The mind/body effect*. New York: Simon & Schuster.

Benson, H. (1987). *Your maximum mind*. New York: Random House.

Berger, P., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. Garden City, NY: Doubleday.

Bergmann, J. (1993). *Discreet indiscretions*. New York: Aldine De Gruyter.

Bies, R., & Tripp, T. (1996). Beyond distrust: "Getting even" and the need for revenge. In R. Kramer & T. Tyler (Eds.), *Trust in organizations* (pp. 246-260). Thousand Oaks, CA: Sage.

Bolger, N., & Kelleher, S. (1993). Daily life in relationships. In S. Duck (Ed.), *Social context and relationships* (pp. 100-108). Newbury Park, CA: Sage.

Boss, R. (1978). Trust and managerial problem solving. *Group and Organizational Studies, 3*(3), 331-342.

Bowlby, J. (1969). *Attachment and loss* (Vol. 1). New York: Basic Books.

Bowlby, J. (1973). *Separation: Anxiety and anger* (Vol. II of Attachment and loss). New York: Basic Books.

Bowlby, J. (1977). The making and breaking of affectional bonds. *British Journal of Psychiatry, 130*, 201-210.

Bowlby, J. (1988). *A secure base: Parent-child attachment and human development*. New York: Basic Books.

Boydell, T., & Leary, M. (1996). *Identifying training needs*. London: Institute of Personnel and Development.

Brien, A. (1998). Professional ethics and the culture of trust. *Journal of Business Ethics, 17*(4), 391-409.

Brooks, A. (1997). Power and the production of knowledge. In D. Russ-Eft & H. Preskill & C. Sleezer (Eds.), *Human resource development review* (pp. 179-205). Thousand Oaks: Sage.

Brown, E., & Guy, R. (1983). The effects of sex and machiavellianism on self-disclosure patterns. *Social Behavior and Personality, 11*(1), 93-96.

Burke, W. (1997). Leadership development. In L. Bassi & D. Russ-Eft (Eds.), *Training and development practices* (pp. 1-24). Alexandria, VA: ASTD.

Chelune, G. (1979). *Self-disclosure: Origins, patterns, and implications of openness in interpersonal relationships*. San Francisco: Jossey-Bass.

Chen, G.-M. (1993). Self-disclosure and asian students' ability to cope with social difficulties in the United States. *The Journal of Psychology, 127*(6), 603-610.

Collins, N., & Read, S. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*(4), 644-663.

Colvin, C., & Longueuil, D. (2001). Eliciting self-disclosure: The personality and behavioral correlates of the opener scale. *Journal of Research in Personality, 35*, 238-246.

Cramer, K., & Barry, J. (1997). Psychometric properties and confirmatory factor analysis of the self-concealment scale. *Personality and Individual Differences, 27*, 629-637.

Creed, W., & Miles, R. (1996). Trust in organizations: A conceptual framework linking organizational forms, managerial philosophies, and the opportunity costs of controls. In R. Kramer & T. Tyler (Eds.), *Trust in organizations* (pp. 16-38).

Thousand Oaks, CA: Sage.

Cross, L., & Belli, G. (2004). Experimental research to inform educational policy. In K. de Marrais & S. Lapan (Eds.), *Foundations of Research Methods of Inquiry in Education and the Social Sciences*: Lawrence Erlbaum Associates.

Cross, L., & Belli, G. (in press). Experimental research to inform educational policy. In S. Lapan (Ed.), *Foundations of Research Methods of Inquiry in Education and the Social Sciences*: Lawrence Erlbaum Associates.

Cummings, L., & Bromiley, P. (1996). The organizational trust inventory (OTI): Development and validation. In R. Kramer & T. Tyler (Eds.), *Trust in organizations* (pp. 302-330). Thousand Oaks, CA: Sage.

Cupach, W., & Metts, S. (1994). *Facework*. Thousand Oaks, CA: Sage.

Daley, D. (1991). Management practices and the uninvolved manager: The effect of supervisory attitiudes on perceptions of organizational trust and change orientation. *Public Personnel Management, 20*(1), 101-113.

Davenport, T., & Prusak, L. (1998). *Working knowledge*. Boston: Harvard Business School Press.

DeCew, J. (1997). *In pursuit of privacy*. Ithaca, NY: Cornell University Press.

Derlega, V., Metts, S., Petronio, S., & Margulis, S. (1993). *Self-disclosure*. Newbury Park, CA: Sage.

Devencenzi, J., & Pendergast, S. (1999). *Belonging: Self and social discovery for children and adolescents*. San Luis Obispo, CA: Sovereignty.

Dindia, K. (1988). A comparison of several statistical tests of reciprocity and self-disclosure. *Communication Research, 15*(6), 726-752.

Dindia, K., & Allen, M. (1992). Sex differences in self-disclosure: A meta-analysis. *Psychological Bulletin, 112*(1), 106-124.

Dirks, K., & Skarlicki, D. (in press). Trust in leaders: Existing research and emerging issues. In R. C. Kramer, K. (Ed.), *Trust within organizations*. Washington: Russell Sage Foundation.

Drucker, P. (1988). The coming of the new organization, *Harvard business review on knowledge management* (pp. 1-20). Boston: Harvard Business School Press.

Drucker, P. (1999). Knowledge-worker productivity: The biggest challenge. *California Management Review, 41*(2), 79-93.

Duffy, C., Lafferty, C., & Lafferty, B. (2001). Organizational trust and attachment to an immediate leader: A pilot study. *AHRD Conference Proceedings, Symposium 6*, 18-25.

Dweck, C. (1999). *Self theories: Their role in motivation, personality and development*. Philadelphia: Psychology Press.

Elangovan, A., & Shapiro, D. (1988). Betrayal of trust in organizations. *Academy of Management Review, 23*(3), 547-566.

Erikson, E. (1997). *The life cycle completed*. New York: W. W. Norton.

Feeney, B., & Collins, N. (2001). Predictors of caregiving in adult intimate relationships: An attachment theoretical perspective. *Journal of Personality and Social Psychology, 80*(6), 972-994.

Feeny, J. (1990). Attachment style as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology, 58*(2), 281-291.

Forbes, A., & Roger, D. (1999). Stress, social support and fear of disclosure. *British*

Journal of Health Psychology, 4(2), 165-179.

Genero, N., Miller, J., Surrey, J., & Baldwin, L. (1992). Measuring perceived mutuality in close relationships: Validation of the mutual psychological development questionnaire. *Journal of Family Psychology, 6*(1), 36-48.

George, C., West, M., & Pettem, O. (1999). The adult attachment perspective: Disorganization of adult attachment at the level of representation. In J. Solomon & C. George (Eds.), *Attachment disorganization* (pp. 462-507). New York: Guilford.

Gibb, J. (1978). *Trust: A new view of personal and organizational development*. Los Angeles: Guild of Tutors Press.

Gibb, J. (1991). *Trust: A new vision of human relationships for business, education, family, and personal living*. North Hollywood, CA: Newcastle.

Gilbert, J., & Tang, T. (1998). An examination of organizational trust antecedents. *Public Personnel Management, 27*(3), 321-338.

Gilley, J., & Maycunich, A. (1998). *Strategically integrated HRD*. Cambridge, MA: Perseus.

Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam.

Gottman, J. (1991). Predicting the longitudinal course of marriages. *Journal of Marital and Family Therapy, 17*(1), 3-7.

Gould, J., Voyer, J., & Ford, D. (1998). Anxiety in the workplace. *Innovations in Management Series*, 1-16.

Hallowell, E. M. (1999). *Connect*. New York: Pantheon.

Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*(3), 511-524.

Hazan, C., & Shaver, P. (1990). Love and work: An attachment-theoretical perspective. *Journal of Personality and Social Psychology, 59*(2), 270-280.

Hazan, C., & Shaver, P. (1994). Deeper into attachment theory. *Psychological Inquiry, 5*(1), 68-79.

Hazan, C., & Zeifman, D. (1994). Sex and the psychological tether. In D. Perlman & K. Bartholomew (Eds.), *Attachment processes in adulthood* (Vol. 5, pp. 151-178). London: Jessica Kingsley.

Hill, C., & Stull, D. (1982). Disclosure reciprocity: Conceptual and measurement issues. *Social Psychology Quarterly, 45*(4), 238-244.

Hinde, R. (1982). Attachment: Some conceptual and biological issues. In C. Parkes & J. Stevenson-Hinde (Eds.), *The place of attachment in human behavior*. New York: Basic.

Horowitz, M., Milbrath, C., Reibord, S., & Stinson, C. (1993). Elaboration and dyselaboration: Measures of expression and defense in discourse. *Psychotherpy Research, 3*(4), 278-293.

Hosmer, L. (1995). Trust: The connecting link between organizational theory and philosophical ethics. *Academy of Management Review, 20*(2), 379-403.

Hossack, R. (1993). A new style of leadership. *Canadian Business Review*, 30-34.

Hubbartt, W. (1998). *The new battle over workplace privacy*. New York: American Management Association.

Hwang, P., & Burgers, W. (1997). Properties of trust: An analytical view. *Organizational Behavior and Human Decision Processes, 69*(1), 67-73.

Izard, C. (1977). *Human emotions*. New York: Plenum.

Jacobs, R., Hyman, M., & McQuitty, S. (2001). Exchange-specific self-disclosure, social self-disclosure, and personal selling. *Journal of Marketing Theory and Practice, 9*(1), 48-62.

Johnson, J. (1981). The "self-disclosure" and "self-presentation" views of item response dynamics and personality scale validity. *Journal of Personality and Social Psychology, 40*(4), 761-769.

Johnson, S. (1999). Emotionally focused couple therapy. In J. Donovan (Ed.), *Short-term couple therapy* (pp. 13-42). New York: Guilford.

Johnson, S., & Greenberg, L. (1995). The emotionally focused approach to problems in adult attachment. In N. Jacobson & A. Gurman (Eds.), *Clinical handbook of couples therapy*. New York: Guilford.

Johnson, S., Makinen, J., & Millikin, J. (2001). Attachment injuries in couple realtionships: A new perspective on impasses in couples therapy. *Journal of Marital and Family Therapy, 27*(2), 145-155.

Johnson, S., & Sims, A. (2000). Attachment theory: A map for couples therapy. In T. Levy (Ed.), *Handbook of attachment interventions*. San Diego: Academic Press.

Jones, G. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of Management Review, 23*(3), 531-546.

Jourard, S. (1971). *Self-disclosure: An experimental analysis of the transparent self*. New York: Wiley-Interscience.

Klohnen, E., & Bera, S. (1998). Behavioral and experimental patterns of avoidantly and securely attached women across adulthood: A 31-year longitudinal study. *Journal of Personality and Social Psychology, 74*(1), 211-223.

Kobak, R., & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation, and representations of self and others. *Child Development, 59*, 135-146.

Korsgaard, M., Broadt, S., & Whitener, E. (2002). Trust in the face of conflict: The role of managerial trustworthy behavior and organizational context. *Journal of Applied Psychology, 87*(2), 312-319.

Kotler, T., & Omodei, M. (1988). Attachment and emotional health: A life span approach. *Human Relations, 41*(8), 619-640.

Kraines, G. (2001). *Accountability leadership*. Franklin Lakes, NJ: Career Press.

Kramer, R. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual Review of Psychology, 50*, 569-598.

Kramer, R. (2002). When paranoia makes sense. *Harvard Business Review, 80*(7), 62-69.

Kramer, R., Brewer, M., & Hanna, B. (1996). Collective trust and collective action: The decision to trust a social decision. In R. Kramer & T. Tyler (Eds.), *Trust in organizations* (pp. 357-389). Thousand Oaks, CA: Sage.

Kurstedt, H. (2002, October). *How do we design for trust?* Paper presented at the Proceedings from the 2002 American Society of Engineering Management National Conference, Tampa, FL.

Kurstedt, H. (2003, July). *Trust lubricates the organizational system: The system dynamics approach*. Paper presented at the 13th Annual Symposium of the International Council of Systems Engineers, Washington, DC.

Lewicki, R., & Bunker, B. (1996). Developing and maintaining trust in work

relationships. In R. Kramer & T. Tyler (Eds.), *Trust in organizations* (pp. 114-139). Thousand Oaks, CA: Sage.

Lewicki, R., McAllister, D., & Bies, R. (1998). Trust and distrust: New relationships and realities. *Academy of Management Review, 23*(3), 438-458.

Lewis, J., & Weigert, A. (1985). Trust as a social reality. *Social Forces, 63*, 967-985.

Locke, S., & Gilbert, B. (1995). Method of psychological assessment, self-disclosure, and experiential differences. *Journal of Social Behavior and Personality, 10*(1), 255-263.

Loevinger, J. (1987). *Paradigms of personality*. New York: W.H. Freeman & Co.

Lopez, F. (1995). Contemporary attachment theory: An introduction with implications for counseling psychology. *The Counseling Psychologist, 23*(3), 395-415.

Luft, H. (1969). *Of human interaction*. Palo Alto, CA: National Press Books.

Maslow, A. (1954). *Motivation and personality*. New York: Harper & Brothers.

Mayer, R., Davis, J., & Schoorman, F. (1995). An integrative model of organizational trust. *Academy of Management Review, 20*(3), 709-734.

McClelland, D. (1975). *Power: The inner experience*. New York: Irvington.

Mezirow, J. (1978). Perspective transformation. *Adult Education, 28*(2), 100-110.

Mikulincer, M. (1997). Adult attachment style and information processing: Individual differences in curiosity and cognitive closure. *Journal of Personality and Social Psychology, 72*(5), 1217-1230.

Mikulincer, M., & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In J. Simpson & W. Rholes (Eds.), *Attachment theory and close relationships* (pp. 143-165). New York: Guilford.

Mikulincer, M., Gillath, O., & Shaver, P. (2002). Activation of the attachment system in adulthood: Threat-related primes increase the accessibility of mental representations of attachment figures. *Journal of Personality and Social Psychology, 83*(4), 881-895.

Mikulincer, M., & Nachshon, O. (1991). Attachment styles and patterns of self-disclosure. *Journal of Personality and Social Psychology, 61*(2), 321-331.

Mishra, A. (1996). Organizational response to crisis: The centrality of trust. In R. Kramer & T. Tyler (Eds.), *Trust in organizations* (pp. 261-287). Thousand Oaks, CA: Sage.

Morgan, G. (1997). *Images of organizations*. Thousand Oaks, CA: Sage.

Nyhan, R., & Marlowe, H. (1997). Development and psychometric properties of the organizational trust inventory. *Evaluation Review, 21*(5), 614-635.

O'Reilly III, C., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology, 71*(3), 492-499.

Parker, R., & Parrott, R. (1995). Patterns of self-disclosure across social support networks: Elderly, middle aged, and young adults. *International Journal of Aging and Human Development, 41*(4), 281-297.

Parkes, C. (1982). Attachment and prevention of mental disorders. In C. Parkes & J. Stevenson-Hinde (Eds.), *The place of attachment in human behavior* (pp. 295-309). New York: Basic Books.

Petronio, S. (2000). The boundaries of privacy: Praxis of everyday life. In S. Petronio

(Ed.), *Balancing the secrets of private disclosures* (pp. 37-50). Mahwah, NJ: Erlbaum.

Petronio, S. (2002). *Boundaries of Privacy: Dialetics of disclosure*. Albany, NY: State Uinversity of New York.

Pistole, C. (1993). Attachment relationships: Self-disclosure and trust. *Journal of Mental Health Counseling, 15*(1), 94-106.

Pistole, C. (1999). Caregiving in attachment relationships: A perspective for counselors. *Journal of Counseling and Development, 77*(4), 437-446.

Pistole, M. (1994). Adult attachment styles: Some thoughts on closeness-distance struggles. *Family Process, 33*, 147-159.

Pistole, M. (1997). Attachment theory: Contributions to group work. *The Journal for Specialists in Group Work, 22*(1), 7-21.

Rawlins, W. (1992). *Friendship matters: Communication, dialectics, and the life course*. New York: Aldine De Gruyter.

Reina, D., & Reina, M. (1999). *Trust and betrayal in the workplace*. San Francisco: Berrrett-Koehler.

Reio, T., & Wiswell, A. (2000). Field investigation of the relationship among adult curiosity, workplace learning, and job performance. *Human Resource Development Quarterly, 11*(1), 5-30.

Rholes, W., Simpson, J., & Stevens, J. (1998). Attachment orientations, social support, and conflict resolution in close relationships. In J. Simpson & W. Rholes (Eds.), *Attachment theory and close relationships*. New York: Guilford.

Roger, R. (1995). The psychological contract of trust -- part I. *Executive Development, 8*(1), 15-19.

Rogers, C. (1961). *On becoming a person*. Boston: Houghton Mifflin.

Rosenfeld, L. (2000). Overview of the ways privacy, secrecy, and disclosure are balanced in today's society. In S. Petronio (Ed.), *Balancing the secrets of private disclosures* (pp. 3-18). Mahwah, NJ: Erlbaum.

Rotter, J. (1967). A new scale for the measurement of interpersonal trust. *Journal of Personality, 35*, 615-665.

Ruder, G. (2003). *The relationship among organizational justice, trust, and role breadth self-efficacy*. Unpublished Dissertation, Virginia Polytechnic and State University, Falls Church, VA.

Sashkin, M. (1992). Strategic leadership competencies. In R. Phillips & J. Hunt (Eds.), *Strategic leadership*. Westport, CN: Quorum Books.

Sashkin, M., & Rosenbach, W. (1998). A new vision of leadership. In W. Rosenbach & R. Taylor (Eds.), *Contemporary issues in leadership*. Boulder, CO: Westview Press.

Sashkin, M., Rosenbach, W., & Sashkin, M. (2001). Toxic leadership: Exploring the difference between charisma and character. *Unpublished article*.

Schein, E. (1990). Organizational culture. *American Psychologist, 45*(2), 109-119.

Schein, E. (1992). *Organizational culture and leadership* (Second ed.). San Francisco: Jossey-Bass.

Schein, E. (1996a). Culture: The missing concept in organizational studies. *Administrative Science Quarterly, 41*(2), 229-240.

Schein, E. (1996b). The three cultures of management: Implications for organizational

learning. *Sloan Managment Review, 38*(1), 9-20.

Schein, E. (1999). *The corporate culture survival guide: Sense and nonsense about culture change*. San Francisco: Jossey-Bass.

Schneider, C. (1977). *Shame, exposure, and privacy*. New York: Norton.

Schwandt, D., & Marquardt, M. (2000). *Organizational learning: From world-class theories to global best practices*. Washington, DC: St. Lucie.

Scott, D. (1981). The development of four new organizational measures of trust. In D. Ray (Ed.), *The relationship between theory, research, and practice: An assessment of fundamental problems and their possible resolution* (pp. 107-109): Southern Management Association.

Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization.* New York: Doubleday.

Seyle, H. (1997). History and present status of the stress concept. In G. & & Breznez (Eds.), *The handbook of stress: Theoretical and physical aspects* (pp. 7-27). New York: Grove Press.

Shaw, R. (1997). *Trust in the balance*. San Francisco: Jossey-Bass.

Sheppard, B. (1998). The grammars of trust: A model and general implications. *Academy of Management Review, 23*(3), 422-437.

Shockley-Zalabak, P., Ellis, K., & Cesaria, R. (2000). Highlights from measuring trust: A diagnostic survey and international indicator. *Communication World*(August-September), 7-9.

Shockley-Zalabak, P., Ellis, K., & Winograd, G. (2000). Organizational trust: What it means, why it matters. *Organizational Development Journal, 18*(4), 35-48.

Simon, H. (1972). Theories of bounded rationality. In C. McGuire & R. Radner (Eds.), *Decision and organization* (pp. 161-176). New York: North-Holland Publishing.

Simon, H. (1976). *Administrative behavior*. New York: Free Press.

Sitkin, S., & Stickel, D. (1996). The road to hell: The dynamics of distrust in an era of quality. In R. Kramer & T. Tyler (Eds.), *Trust in organizations* (pp. 196-215). Thousand Oaks, CA: Sage.

Small, M. (2002). Practical problems and moral values: Things we tend to ignore revisited. *Journal of Business Ethics, 39*(4), 401-407.

Snell, W., Miller, M., Belk, S., Garcia-Falconi, R., & Hernandez-Sanchez, J. (1989). Men's and womens' emotional self disclosures: The impact of disclosure recipient, culture and the masculine role. *Sex Roles, 21*(7&8), 467-486.

Steele, F. (1975). *The open organization*. Reading, MA: Addison-Wesley.

Stiles, W., Shuster, P., & Harrigan, J. (1992). Disclosure and anxiety: A test of the fever model. *Journal of Personality and Social Psychology, 63*(6), 980-988.

Tyler, T., & Kramer, R. (1996). Whither trust? In R. Kramer & T. Tyler (Eds.), *Trust in organizations* (pp. 1-15). Thousand Oaks, CA: Sage.

Ubel, P., Zell, M., Miller, D., Fischer, G., Peters-Stefani, D., & Arbold, R. (1995). Elevator talk: Observational study of inappropriate comments in a public space. *The American Journal of Medicine, 99*, 190-194.

Vaill, P. (1991). *Managing as a performing art*. San Francisco: Jossey-Bass.

Vaill, P. (1996). *Learning as a way of being: Strategies for survival in world of permanent white water*. San Francisco: Jossey-Bass.

Vaillant, G. E. (1977). *Adaptation to life*. Boston: Little Brown.

Vangelisti, A. (1994). Family secrets: Forms, functions and correlates. *Journal of Social and Personal Relationships, 11*, 113-135.

Vangelisti, A., & Banski, M. (1993). Couples' debriefing conversations: The impact of gender, occupation, and demographic characteristics. *Family Relations, 42*(2), 149-157.

Waters, E., Hamilton, C., & Weinfield, N. (2000). The stability of attachment security from infancy to adolescence and early adulthood: General introduction. *Child Development, 71*(3), 678-683.

Waters, E., Merrick, S., Treboux, D., Crowell, J., & Albersheim, L. (2000). Attachment security in infancy and early adulthood: A twenty-year longitudinal study. *Child Development, 71*(3), 684-689.

Watkins, C. (1990). The effects of counselor self-disclosure: A research review. *The Counseling Psychologist, 18*(3), 477-500.

Weber, L., & Carter, A. (1998). On constructing trust: Temporality, self-disclosure, and perspective-taking. *The International Journal of Sociology and Social Policy, 18*(1), 7-26.

Weick, K. (1979). *The social psychology of organizing*. New York: Random House.

Weick, K. (1995). *Sensemaking in organizations*. Thousand Oaks, CA: Sage.

Weidner II, C. (1997). *Trust and distrust at work: Normative and dyad-exchange influences on individual and subunit performances.* Unpublished dissertation, University of Chicago, Chicago.

Weiss, R. (1982). Attachment in adult life. In C. Parkes & J. Stevenson-Hinde (Eds.), *The place of attachment in human behavior*. New York: Basic Books.

Wheeless, L. (1976). Self-disclosure and interpersonal solidarity: Measurement, validation, and relationships. *Human Communication Research, 3*(1), 47-61.

Wheeless, L. (1978). A follow-up study of the relationships among trust, disclosure, and interpersonal solidarity. *Human Communication Research, 4*(2), 143-157.

Wheeless, L., & Grotz, J. (1976). Conceptualization and measurement of reported self-disclosure. *Human Communication, 2*(4), 338-346.

Wheeless, L., & Grotz, J. (1977). The measurement of trust and its relationship to self-disclosure. *Human Communication Research, 3*(3), 250-257.

Whitener, E. (1998). Managers as initiators of trust: An exchange relationship framework for understanding managerial trustworthy behavior. *Academy of Management Review, 23*(3), 513-530.

Wicks, A., Berman, S., & Jones, T. (1999). The structure of optimal trust: Moral and strategic implications. *Academy of Management Review, 24*(1), 99-116.

Wigley, C. (1999). Verbal aggressiveness and communicator style characteristics of summoned jurors as predictors of actual jury selection. *Communication Monographs, 66*, 266-275.

Wilber, K. (2000). *Integral psychology*. Boston: Shambhala.

Won-Doornik, M. (1985). Self-disclosure and reciprocity in conversation: A cross-national study. *Social Psychology Quarterly, 48*(2), 97-107.

Zand, D. (1972). Trust and managerial problem solving. *Administrative Science Quarterly, 17*(2), 229-239.

Zand, D. (1997). *The leadership triad*. New York: Oxford University Press.

November 11, 2003
AL/HRD Doctoral Program
Room 202 J, Northern Virginia Center
7054 Haycock Road
Falls Church, VA 22043-2311

Dear Employee:

You have been selected to participate in a research study regarding workplace behavior and attitudes. Your participation will help us better understand the background and development of relationships and teamwork within organizations. As you will see in responding to the questions, we're interested in your point of view. Your input will help to ensure the accuracy of our research findings and also help us to make organizations better places to work.

If you choose to participate in the research study please sign the consent statement and complete the attached questionnaire. An additional copy of the consent statement is provided for your records.

Please place the signed consent statement and the completed questionnaire in the stamped envelope that is provided in your package. Please mail the envelope by no later than November 21, 2003. It will be delivered to the research coordinator at the AL/HRD Program address above.

All responses will be strictly confidential. The research coordinator will immediately separate the consent statements from the survey forms. Only aggregated information on the responses to the questionnaires will be used during the course of the research. No name-specific information will be provided to your employer, Virginia Tech, or any other organization. Information for participants will be made available in a memorandum for all employees of the participating unit regardless of which employees participated.

Completing the questionnaire will take about 15 to 20 minutes. Please be sure to complete all questions to the best of your ability. There are no right or wrong answers.

Thank you for your assistance in collecting this vital information.

With appreciation,

Samuel Adams
Research Coordinator

Enclosures (3)

Informed Consent Statement
Virginia Tech Adult Learning & HRD Graduate Program

What is the purpose of this research study?

The research will enable the research coordinator to study organizational relationships.

What do I have to do?

Please complete the enclosed survey instrument concerning issues associated with your organization and your work. The instrument also includes demographic information that will enable the research coordinator to conduct analyses for patterns based on demographic factors. Complete responses will help to ensure the accuracy of our research findings, however, you are free to answer the questions as you see fit.

Are there any risks involved or benefits for participating?

We are not aware of any risks or any direct benefits for participating in this research study. The results of the study may provide information that will help organizations become more effective and more satisfying places to work.

Is the research confidential?

Yes. We will not divulge your name. The research coordinator will immediately separate the consent forms from the survey forms. We will aggregate information about you and other participants so that individual participants cannot be identified. The responses to the surveys will be entered into the research coordinator's personal computer based on numbers generated by the computer. No record of any names will be stored on the computer. Only aggregated data and analyses will be provided to the participants in the project, your organization, and Virginia Tech. Information for participants will be made available in a memorandum for all employees of the participating unit regardless of which employees participated.

Will I be paid to participate in this research study?

Your participation is completely voluntary. There is no payment for your participation.

Approval of Research

I voluntarily agree to participate in this research study. I have read and understand the informed consent statement and the conditions of this project. I have had all my questions answered and understand that the Virginia Tech Institutional Review Board has approved this study.

_____   _____   _____
Signature   Date   Name (please print)

Should I have any questions about this research or its conduct, I may contact:
Sam Adams, Research Coordinator (301) 587-1870
Dr. Albert Wiswell (703) 538-8468

SURVEY ON WORKPLACE PERCEPTIONS

Part A.   ORGANIZATIONAL RELATIONSHIPS
The following statements concern the organization where you are employed. Please indicate how strongly you agree or disagree with each statement. **Mark your answers as follows**: **1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree.**

		1=Strongly Disagree 5=Strongly Agree
1.	I feel free to discuss work problems with my immediate supervisor without fear of having it used against me later.	1 2 3 4 5
2.	I have complete trust that my immediate supervisor will treat me fairly.	1 2 3 4 5
3.	If I make a mistake my supervisor is willing to "forgive and forget."	1 2 3 4 5
4.	My supervisor is friendly and approachable.	1 2 3 4 5
5.	I can count on my immediate supervisor for help if I have difficulties with my job.	1 2 3 4 5
6.	There is trust in one another among members of my workgroup.	1 2 3 4 5
7.	I can share sensitive information with members of my workgroup because I know group members will hold it in strict confidence.	1 2 3 4 5
8.	I have complete trust that members of my workgroup will treat me fairly.	1 2 3 4 5
9.	I can rely on members of my workgroup to help me if I have difficulties getting the job done.	1 2 3 4 5
10.	Management has little regard for the well being of people who work for this organization.	1 2 3 4 5
11.	At my organization, management cannot be trusted.	1 2 3 4 5
12.	When management must make DECISIONS which seem to be against the best interests of the employee, I believe that management's decisions are justified by other considerations.	1 2 3 4 5
13.	Management seldom follows through with what they say they are going to do.	1 2 3 4 5
14.	Employees here feel you can't trust this organization	1 2 3 4 5
15.	People in this organization will do things behind your back.	1 2 3 4 5
16.	The level of trust among people I work with on a regular basis is very high.	1 2 3 4 5
17.	The degree to which we can depend on each other in this organization is very high.	1 2 3 4 5

Part B.   COMMUNICATIONS
Please mark the following statements to reflect how you communicate with other people in general in the organization in which you work. Record the number of your response by circling the number provided. Work quickly and just record your first impression. **NOTE: THE RATING SCALE HAS CHANGED as follows: 1=Strongly Disagree, 2=Disagree, 3=Moderately Disagree, 4=Undecided, 5=Moderately Agree, 6=Agree, and 7=Strongly Agree.**

		1=Strongly Disagree 7=Strongly Agree
1.	When I express my personal feelings, I am always aware of what I am doing and saying.	1 2 3 4 5 6 7
2.	When I reveal my feelings about myself, I consciously intend to do so.	1 2 3 4 5 6 7
3.	When I am self disclosing, I am consciously aware of what I am revealing.	1 2 3 4 5 6 7

Continued →

		1=Strongly Disagree 7=Strongly Agree						
4.	I do not often talk about myself.	1	2	3	4	5	6	7
5.	My statements of my feelings are usually brief.	1	2	3	4	5	6	7
6.	I usually talk about myself for fairly long periods at a time.	1	2	3	4	5	6	7
7.	My conversation lasts the least time when I am discussing myself.	1	2	3	4	5	6	7
8.	I often talk about myself.	1	2	3	4	5	6	7
9.	I often discuss my feelings about myself.	1	2	3	4	5	6	7
10.	Only infrequently do I express my personal beliefs and opinions.	1	2	3	4	5	6	7
11.	I usually disclose positive things about myself.	1	2	3	4	5	6	7
12.	On the whole, my disclosures about myself are more negative than positive.	1	2	3	4	5	6	7
13.	I normally reveal "bad" feelings I have about myself.	1	2	3	4	5	6	7
14.	I normally express my "good" feelings about myself.	1	2	3	4	5	6	7
15.	I often reveal more undesirable things about myself than desirable things.	1	2	3	4	5	6	7
16.	I usually disclose negative things about myself.	1	2	3	4	5	6	7
17.	On the whole, my disclosures about myself are more positive than negative.	1	2	3	4	5	6	7
18.	I intimately disclose who I really am, openly and fully in my conversation.	1	2	3	4	5	6	7
19.	Once I get started, my self-disclosures last a long time.	1	2	3	4	5	6	7
20.	I often disclose intimate, personal things about myself without hesitation.	1	2	3	4	5	6	7
21	I feel that I sometimes do not control my self-disclosure of personal or intimate things I tell about myself.	1	2	3	4	5	6	7
22.	Once I get started, I intimately and fully reveal myself in my self-disclosures.	1	2	3	4	5	6	7
23.	I cannot reveal myself when I want to because I do not know myself thoroughly enough.	1	2	3	4	5	6	7
24.	I am often not confident that my expressions of my own feelings, emotions, and experiences are true reflections of myself.	1	2	3	4	5	6	7
25.	I always feel completely sincere when I reveal my own feelings and experiences.	1	2	3	4	5	6	7
26.	My self-disclosures are completely accurate reflections of who I really am.	1	2	3	4	5	6	7
27.	I am not always honest in my self-disclosure.	1	2	3	4	5	6	7
28.	My statements about my own feelings, emotions, and experiences are always accurate self-perceptions.	1	2	3	4	5	6	7
29.	I am always honest in my self-disclosures.	1	2	3	4	5	6	7
30.	I do not always feel completely sincere when I reveal my own feelings, emotions, and behaviors or experiences.	1	2	3	4	5	6	7

Part C: RELATIONSHIP SURVEY
The following are statements about you in relation to others. Instructions: Please circle the response that best describes your relationships. . **NOTE: THE RATING SCALE HAS CHANGED as follows: 1=Strongly Disagree, 7=Strongly Agree, and 9=Don't Know.**

		1=Strongly Disagree 7=Strongly Agree 9=Don't know							
1.	I find others are reluctant to get as close as I would like.	1	2	3	4	5	6	7	9

Continued →

		1=Strongly Disagree 7=Strongly Agree 9=Don't know							
2.	I am not sure that I can always depend on others to be there when I need them.	1	2	3	4	5	6	7	9
3.	Sometimes people do not want to get close to me because I want so much to be close to them.	1	2	3	4	5	6	7	9
4.	I find it difficult to allow myself to depend on others.	1	2	3	4	5	6	7	9
5.	I am nervous when anyone gets too close.	1	2	3	4	5	6	7	9
6.	I am uncomfortable being without close relationships, but I sometimes worry that others do not value me as much as I value them.	1	2	3	4	5	6	7	9
7.	I worry that I will be hurt if I allow myself to become too close to others.	1	2	3	4	5	6	7	9
8.	I want emotionally close relationships, but I find it difficult to trust others completely.	1	2	3	4	5	6	7	9
9.	I am comfortable depending on others.	1	2	3	4	5	6	7	9
10.	I often want to get closer to others than they want to get to me.	1	2	3	4	5	6	7	9
11.	People are never there when you need them.	1	2	3	4	5	6	7	9
12.	I know that others will be there when I need them.	1	2	3	4	5	6	7	9
13.	I find it difficult to trust others completely.	1	2	3	4	5	6	7	9
14.	I do not often worry about someone getting too close to me.	1	2	3	4	5	6	7	9
15.	I do not often worry about other people letting me down.	1	2	3	4	5	6	7	9
16.	I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like.	1	2	3	4	5	6	7	9
17.	I find it relatively easy to get close to others.	1	2	3	4	5	6	7	9
18.	My desire to merge sometimes scares people away.	1	2	3	4	5	6	7	9
19.	I am somewhat uncomfortable being close to others.	1	2	3	4	5	6	7	9

Part D: DEMOGRAPHICS

Please circle or fill in your response.

1.	Number of years with your organization.	
2.	Number of years with current supervisor.	
3.	Year of Birth	
4.	Sex	a. Female b. Male
5.	Your position	a. Administrative b. Professional c. Senior Manager
6.	Education Level	a. Some High School b. Completed High School c. Some College d. BA or BS degree e. Masters degree f. Ph. D. or M.D.

Comments: _____

_____

_____

Please return your signed consent form and the completed questionnaire in the envelope you were provided.   *End. Thank You!*

Appendix B

The following is a summary of the comments received from participants of the two companies. After each comment is listed the number of the survey from which the comments are taken. Eight of the participants who provided comments from Company 1 did not provide a signed consent statement. Three of the participants from Company 2 who provided comments did not provide a signed consent statement. My explanatory comments are in brackets.

Company 1

- Had several comments taking exception to the wording of the questions and the scales of the instruments used for the study. (N023)
- Saw the questions in the survey as redundant. (N029)
- Saw the questions in the survey as redundant. (N050)
- Commented that he "hates" surveys. (N054)
- Commented that the change in rating scales was distracting and wished me good luck with the research. (N055)
- Saw the questions as similar and said they got "tiresome." (N058)
- Wondered if the first question in Part C [relating to DS] about closeness to others meant "physical or emotional." (N063)
- Found Part C of the survey [relating to DS] difficult to complete because a supervisor should not be sharing sensitive or confidential information with employees. (N073)
- Found many of the questions redundant. Also noted that some questions with negative statements (e.g., "I am often not confident…") were difficult to answer. (N075)
- Found many of the questions odd and not relevant to the workplace. Noted that he had no desire to "merge" with anyone in the workplace [question 19 in Part C relating to attachment]. (N098)
- Commented that the questions were strange and asked if I was looking for "weirdos." (N101)
- Wrote comments on a separate page and did not sign the consent form. "I feel totally justified in being concerned about the risks in providing honest responses to these survey questions. An honest response to the demographic questions [Part D] allows easy identification of many staff persons; however, I did want to complete the survey in order that it is included [sic]. The 9 = don't know threw a wrench into the idea of providing quick responses. You should've constantly repeated that this is about the workplace. Outside life is very different for a lot of people. I had to keep thinking about the two areas, which are very different. I am less and less myself in this environment. Why do you use words like merge and self-disclosure? That's psychobabble." (N107)
- Found the questions in parts B and C [relating to disclosure and attachment] to be intrusive and tricky. Stated that a question on workplace privacy would have been interesting. (N108)

- Commented that the changes to the rating scales were confusing. (N110)

Company 2

- Commented that Part C [relating to attachment] seemed more geared to personal rather than professional relationships. (C001)
- Found the questions to be confusing and repetitive. (C005)
- Commented that he was working for a good boss and was open to learning. He stated he was also working to improve peer relationships and wanted to be seen as a "team player." (C006)
- Commented that the workplace had changed over the last 15 years and that loyalty is a two-way street. Noted that a company that requires 7 years' service for vesting [in the retirement plan] doesn't bring "warm and fuzzy" feelings. Commented that this action on the part of the company causes employees to be careful about "emotions etc." (C026)
- Found that responding to Part C questions [relating to attachment] was difficult because the scale had changed. (C035)
- Noted that the questions were "interesting" and asked what "merge" meant [item 18 regarding attachment]. (C036)
- Asked what was the meaning of the word "merge" [question 18 regarding attachment). (C037)
- Commented that the Part C questions on attachment were confusing from the perspective of the workplace. (C059)
- Sensed that there was a "pecking order" in the workplace imposed by supervisors. Felt that administrative personnel got fewer "liberties" and were usually "forgotten" during group activities. (C077)
- Commented that he did not "like" this survey. (C079)
- Thanked me for the "opportunity to help out." (C086)
- Found it difficult to respond to Part B questions [relating to disclosure]. (C097)
- Commented that on the whole the company was "good to work for" and that management leaves her alone to do the work and trusts her to "follow through." (C102)
- Commented that the rating scale in Part C [regarding attachment] was hard to use. (C103)
- Found the wording of the questions in Part C [regarding attachment] to be awkward and negative. (C105)

Appendix C

Factor Analysis for Revised Trust Scale

The following table displays the item loadings on the trust subscales based on a combination of items from Scott (1981), Daley (1991), and Nyhan, et al. (1997). The table was developed to test the factor loading using Varimax Rotation for three subscales: trust in supervisor, trust in peers, and trust in upper-level management. These were the names of the subscales originally developed by Scott (1981).

C1: **Item Loadings for Trust Subscales**			
	Trust Component		
Trust Item	1 (Super.)	2 (Peer)	3 (Upper Mgmt.)
Super. 1	.771		
Super. 2	.854		
Super. 3	.803		
Super. 4	.847		
Super. 5	.781		
Peer 6		.827	
Peer 7		.809	
Peer 8		.838	
Peer 9		.791	
Mgmt. 10			.801
Mgmt. 11			.817
Mgmt. 12			**.315**
Mgmt. 13			.696
Mgmt. 14 *			.753
Mgmt. 15 *			.718
Peer 16 **		.731	
Peer 17 **		**.628**	.471

*Items from Daley (1991).
** Items adapted from Nyhan, et al. (1997).
Note: Items appear in sequence of the survey questions shown in Appendix A. Loadings below .300 are not shown. The three factors explained 70% of the variance, and the smallest eigenvalue for any factor was 1.7. Because item 12 loaded weakly on trust in upper management, it was excluded from the revised subscale on upper management. Peer item 17 was included in the peer trust scale because the loading for this item was strongest on peer trust.

Appendix D

D1: **Correlation Matrix of Subscales Used in this Study*** (N = 188)

	Super.	Peer	Mgmt.	Int.	Amt.	Pos.	Depth	Hon.	Preocc.	Fear.	Sec.
Super.Trust: Pearson	1.00										
Sig.	.										
Peer Trust: Pearson	.464[a]	1.00									
Sig.	.000	.									
Mgmt. Tr.: Pearson	.428[a]	.557[a]	1.00								
Sig.	.000	.000	.								
Intent DS: Pearson	.157[o]	.073	.092	1.00							
Sig.	.032	.317	.211	.							
Amt. of DS: Pearson	.055	.129	.010	-.193[a]	1.00						
Sig.	.450	.077	.887	.008	.						
Posit. DS: Pearson	.142	.021	.031	.352[a]	-.210[a]	1.00					
Sig.	.052	.779	.675	.000	.004	.					
Depth DS: Pearson	-.059	.009	-.039	-.303[a]	.535[a]	-.376[a]	1.00				
Sig.	.424	.897	.597	.000	.000	.000	.000				
Honest DS: Pearson	.206[a]	.168[o]	.141	.374[a]	-.128	.345[a]	-.162[o]	1.00			
Sig.	.005	.021	.053	.000	.079	.000	.026	.			
Preocc. AA: Pearson	-.163[o]	-.276[a]	-.206[a]	-252[a]	.175[o]	-.282[a]	.269[a]	-.328[a]	1.00		
Sig.	.026	.000	.005	.000	.017	.000	.000	.000	.		
Fearful AA: Pearson	-.163[o]	-.404[a]	-.389[a]	-.176	-.016	-.204[a]	.102	-206[a]	.406[a]	1.00	
Sig.	.025	.000	.000	.016	.827	.005	.162	.005	.000	.	
Secure AA: Pearson	.197[a]	.236[a]	.224[a]	.269[a]	-.025	.318[a]	-.119	.408[a]	-.416[a]	-.555[a]	1.00
Sig.	.007	.001	.002	.000	.729	.000	.104	.000	.000	.000	.

* Revised trust items are drawn from Scott (1981), Daley (1991), and Nyhan et al.. (1997). Disclosiveness subscales are drawn from Wheeless (1978). Adult attachment subscales are drawn from Becker et al. (1997).

[a] Correlation is significant at the .01 level (two tailed).

[o] Correlation is significant at the .05 level (two tailed).

Samuel Hamilton Adams

Professional Experience

Adjunct Professor, DeVry University (2004). Teach classes on career development and small group communication to upper-classmen at the Crystal City, Virginia, campus.

Senior Associate, Kelly, Anderson & Associates, Inc. (2003). Provided support for consulting assignments on a broad spectrum of planning, organizational and management disciplines. Participated in Federal government services contracts related to human resources development and training.

Training Program Manager, Department of the Interior University (1999 - 2002). Launched and managed a series of Government-wide adult education programs through the Department of the Interior University. These programs were titled "Career, Balance and Diversity" for entry and mid-level personnel and "Envision, Communicate and Lead" for Senior Federal Managers and Senior Executives in the Department. Speakers for the programs included Margaret Wheatley, William Isaacs, and Deborah Tannen.

Training Program Manager for the Office of Inspector General, Department of the Interior (1993 - 1999). In consultation with senior executive leadership of the Office, prepared annual training program for the staff of the office and managed the accomplishment of training and the expenditure of budgeted resources.

Executive Assistant to the Inspector General, Department of the Interior (1989 - 1993). Advised the Inspector General regarding his strategic plan for the Office and his operating decisions to achieve his overall goals for the Office. Represented the Inspector General in discussions with his senior executive leaders.

OMB Liaison for the President's Councils for Integrity and Efficiency and Management Improvement (1986 - 1989). The two Councils consisted of over 50 presidential appointees and career senior executives. Advised the Deputy Director of the Office of Management and Budget (OMB) regarding his leadership of the Councils and attaining the President's management improvement goals for the Federal Government.

Planning and Budget Director for the Office of Inspector General, Department of Heath and Human Services (1983 – 1986). Supervised a staff responsible for over $110 million annually. Advised presidentially appointed Inspector General regarding acquisition and allocation of financial resources to accomplish the mission of the Office.

Military. Served as an officer in the U.S. Navy from 1968 to 1972.

Publications, Recognition, and Awards

"A Conceptual Exploration of the Antecedents of Organizational Trust," AHRD Conference, March 2004
Received numerous monetary and other awards during Federal service
President, Graduate Student Assembly for Virginia Tech, Northern Virginia Center, 2003-2004
Secretary, Northern Virginia Chapter of Phi Delta Kappa, 2002-2004
Inducted into Phi Kappa Phi and Kappa Omicron Nu Honor Societies at Virginia Tech, 2002

Education

Doctoral Candidate, Virginia Tech,
M.P.A., Cornell University,
B.A., Carleton College