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DISSERTATION

**BROADENING OUR PERSPECTIVE OF EMPLOYEE-ORGANIZATION LINKAGES:
FROM ORGANIZATIONAL COMMITMENT TO
ORGANIZATIONAL ATTACHMENT**

Submitted by

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In partial fulfillment of the requirements

for the Degree of Doctor of Philosophy

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Summer 2001

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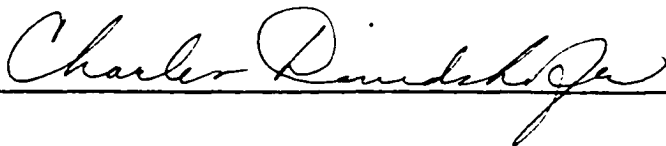
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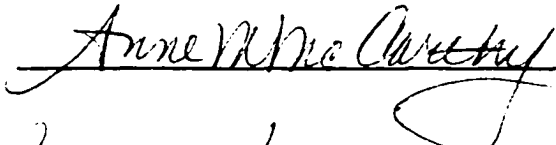
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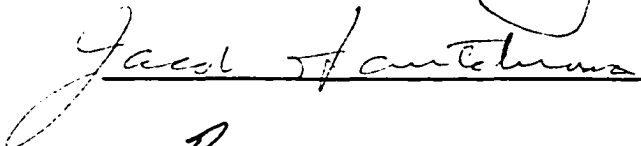
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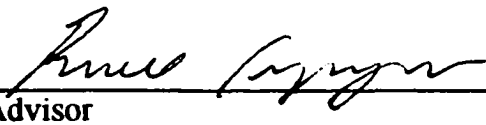
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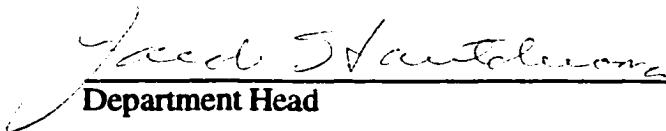








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ABSTRACT OF DISSERTATION
BROADENING OUR PERSPECTIVE OF EMPLOYEE-ORGANIZATION LINKAGES:
FROM ORGANIZATIONAL COMMITMENT TO
ORGANIZATIONAL ATTACHMENT

Attachment theory was applied to the study of employee-organization linkages. In addition, the predictive efficacy of organizational attachment was compared to that of organizational commitment. Two hundred and eighty four participants completed measures of organizational attachment, organizational commitment, stress, perceived organizational support, turnover intentions, and performance. Results showed that both attachment and commitment are useful predictors of employee cognitions. Neither construct predicted performance (in-role or contextual) consistently. It is suggested that attachment theory can enhance organizations' understanding of important employee cognitions and behaviors.

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Chapter 1

INTRODUCTION

Few topics in organizational psychology have garnered as much attention as organizational commitment. Part of the attraction appears to be due to the implied advantages of a committed workforce. For example, Meyer and Allen (1997) note that commentators usually describe a committed employee as “one who stays with the organization through thick and thin, attends work regularly, puts in a full day (and maybe more), protects company assets, shares company goals, and so on...” (p. 3). Research on organizational commitment has confirmed some of these expected relationships (e.g., commitment predicts turnover; Stanley, Meyer, Topolnytsky, & Herscovitch, 1999). However, many of the anticipated links have not been supported (e.g., commitment does not relate strongly or consistently to in-role job performance; Mowday, Porter, & Steers, 1982; Stanley et al., 1999).

In reviewing the research evidence, it will be suggested that conceptual restrictions in commitment definitions and/or problems with measurement contribute to many of the unconfirmed hypotheses. In an attempt to remedy this situation, a broader approach to conceptualizing employee-organization linkages is proposed. Borrowing from child and adult attachment theories, employee-organization linkages will be conceptualized as attachment relationships. These relationships can be characterized by varying levels of anxiety and avoidance. It is expected that employees’ levels of anxiety and avoidance in relationship to their employers will predict several outcomes, including turnover intentions, performance, and stress. The utility of an attachment approach versus a commitment approach in conceptualizing employee-organization linkages will also be compared.

Traditional Approaches to Understanding Organizational Commitment

As many scholars have noted, organizational commitment has been defined and measured in a multitude of ways (Mathieu & Zajac, 1990; Meyer & Allen, 1997; Morrow, 1983; Reichers, 1985). For example, Morrow (1983) counted over 25 commitment definitions and related measures. Despite this versatility, there are also important points of agreement. Most notably, many of these approaches emphasize the idea that commitment involves a psychological bond or attachment between an employee and his or her employer (Allen & Meyer, 1996; Buchanan, 1974; Mathieu & Zajac, 1990; Meyer & Allen, 1997; Mowday, 1998; O'Reilly & Chatman, 1986). The approaches differ, however, in the ways in which they define the nature of the employee-organization bond.

In reviews of the commitment literature (e.g., Meyer & Allen, 1997; Mowday, 1998), three major approaches to conceptualizing employee-organization bonds emerge. First, Mowday, Porter, and Steers (1982) approach commitment as an affective attachment to the organization which should have implications for performance and retention. Second, Meyer and Allen (1984) and Allen and Meyer (1990) offer a multi-dimensional view of commitment in which affective, calculative, and normative attachments affect employees' intentions to remain with the organization. Finally, O'Reilly and Chatman (1986) propose three bases of attachment which can induce a state of commitment. Each of these approaches has received varying degrees of support, but several expected relationships have not emerged. Next, I will describe each of the theories in more detail. I will also discuss the validation evidence for each theory by reviewing research on factor structures and nomological networks (Cronbach & Meehl, 1955; Nunnally & Bernstein, 1994).

Mowday, Porter, and Steers (1982)

Mowday et al. (1982) provided one of the first attempts at specifying the nature of employee-organization attachments. After reviewing existing literature (e.g., Etzioni, 1961; Kanter, 1968), Mowday et al. defined organizational commitment as "the relative strength of an individual's identification and involvement with the organization" (p. 27).

Furthermore, they proposed that an employee would manifest their commitment in at least three ways: 1) by strongly believing in and accepting the organization's values, 2) by exerting effort for the organization and 3) by having a strong desire to stay with the organization. They argued that these three aspects of commitment were all related and represented a single underlying (commitment) construct.

Factor structure. Mowday, Steers, and Porter (1979) developed the Organizational Commitment Questionnaire (OCQ) based on the aforementioned commitment definition. Though the items tap the three separate aspects of commitment, studies of the factor structure of the instrument consistently confirm that the facets represent a single unidimensional construct (Kacmar, Carlson, & Brymer, 1999; Mowday et al., 1979).

Consequences of commitment. Mowday et al. (1982) argue that organizational commitment should relate to several withdrawal behaviors (e.g., turnover, attendance) as well as job performance. While there has not been an explicit meta-analysis using Mowday's commitment measures, Mathieu and Zajac (1990) report that over 80% of the studies in their sample employed the OCQ. In this meta-analysis, the link between attitudinal commitment and turnover intentions was strong (corrected $r = -.47$). However, the relationship between commitment and actual turnover behavior was smaller ($r = -.23$). The latter confidence interval also included 0, calling into question the stability of this relationship. The relationship between commitment and attendance also appears to be small. Mathieu and Zajac (1990) reported a corrected correlation of .10.

Finally, commitment, as measured by the OCQ, is weakly, if at all, linked to in-role job performance. Though Mowday et al.'s (1982) conception of commitment involves a willingness to exert effort on behalf of the organization, Mathieu and Zajac (1990) report a small correlation between attitudinal commitment and performance ($r = .14$). The confidence interval for this relationship also includes 0. Mowday et al. (1982) report similar results.

Meyer and Allen (1984) and Allen and Meyer (1990)

While Mowday et al. (1982) partially defined commitment as an acceptance of organizational goals and values, Meyer and Allen (1984) argued that employees can become committed to an organization for reasons other than value-congruence. Reviewing the work of Becker (1960), Meyer and Allen noted that employees sometimes stay with an organization because they feel they have to-- that leaving would result in a loss of too many investments (or side-bets). Meyer and Allen then developed a measure of this type of attachment, which they termed continuance commitment. They also recognized that employees can be attached to organization for more emotional reasons, which they termed affective commitment. (Affective commitment is conceptually and empirically similar to Mowday et al.'s definition of commitment; Allen & Meyer, 1996; Mowday, 1998). In 1990, Allen and Meyer identified an additional form of commitment, normative commitment. Building upon the work of Wiener (1982), they argued that some employees stay with the organization because they feel obligated to do so-- they feel a moral duty to stay.

Meyer and Allens' works contributed to the commitment literature by identifying a broader array of reasons why employees feel attached to their organizations. Their overall definition of organizational commitment - a psychological bond that makes it less likely that the employee will voluntarily leave the organization- is broad enough to allow for different types of psychological attachments (Allen & Meyer, 1996). People who are affectively committed stay with the organization because they like it and identify with it. People with a high degree of continuance commitment stay because leaving the organization would be too costly and they feel they have no other alternatives. Employees with a strong sense of normative commitment stay with an organization out of a sense of obligation.

Factor structures. Several studies confirm the existence of Meyer and Allen's (1984) two-dimensional model of commitment (McGee & Ford, 1987; Meyer & Allen, 1984; Meyer, Allen, & Gellatly, 1990; Meyer, Paunonen, Gellatly, Goffin, & Jackson,

1989). In addition, confirmatory factor analyses demonstrate that normative commitment is unique from affective and calculative commitment (Allen & Meyer, 1990, 1996; Hackett, Bycio, & Hausdorf, 1992).

Consequences of commitment. Allen and Meyer's (1990) commitment definition predicts that high scores on all three facets of commitment should be negatively related to turnover. A recent meta-analysis (Stanley et al., 1999) shows that affective commitment has the strongest relationship with turnover intentions ($r = -.43$) and turnover ($r = -.23$). Normative commitment also correlates with these variables, though less strongly ($r = -.23$ for turnover intentions and $r = -.16$ for actual turnover). However, continuance commitment is weakly related to turnover intentions ($r = -.18$) and inconsistently related to turnover behavior as the confidence interval for this relationship includes 0 (corrected $r = -.07$ with a confidence interval ranging from $-.21$ to $.07$).

With respect to absenteeism, another withdrawal behavior, the results are similar to those found with Mowday et al.'s (1982) commitment definition (Stanley et al., 1999). Affective commitment had a weak relationship with absenteeism ($r = -.12$). The relationships between absenteeism and the continuance and normative facets are negligible (corrected r 's = $.04$).

The relationships of affective, calculative, and normative commitment to performance appear to depend on one's definition of performance. Stanley et al.'s (1999) meta-analysis reveals a weak link between affective commitment and in-role job performance ($r = .16$). Continuance and normative commitment have small and inconsistent relationships with this variable ($r = -.06$ and $.05$ respectively, both confidence intervals include 0). Commitment appears to have a stronger link with extra-role (i.e., contextual performance, OCB, prosocial behavior) job performance. While in-role performance generally refers to the performance of actual job duties, extra-role behaviors refer more to the manner in which one's job is performed and whether employees go beyond formal job requirements (Borman & Motowidlo, 1993; Organ & Ryan, 1995).

Stanley et al.'s meta-analysis reveals a moderately strong link between affective commitment and contextual performance ($r = .29$). Normative commitment also relates, though less strongly ($r = .19$). Continuance commitment had no relationship with this variable.

O'Reilly and Chatman (1986)

At about the same time as Meyer and Allen were developing their multi-dimensional view of commitment, another set of researchers were taking a very different approach to understanding employee-organization attachments. O'Reilly and Chatman (1986) argued that many of the problems with the commitment literature arose because scholars failed to carefully differentiate between the antecedents and consequences of commitment. For example, reviewing Mowday et al.'s (1982) definition of commitment, the authors argue that the latter two components- willingness to exert effort and intention to remain- are consequences of commitment, not aspects of it. Instead, O'Reilly and Chatman argue that commitment is a psychological attachment to the organization which reflects the degree to which an individual has internalized or adopted characteristics of the organization. High levels of internalization lead the employee to identify with the organization more closely and form a stronger psychological attachment.

Based on Kagan's (1958) classic work on attitude change, O'Reilly and Chatman (1986) proposed that employees can internalize/accept the organization at different levels. People who are *compliant* are involved with the organization only to gain extrinsic rewards. They do not really internalize the organization's goals or values, but have an attachment based on external gains. People who *identify* with the organization respect the organization's goals, but do not necessarily internalize them. Their attachment to the organization is based on a desire for affiliation, but this does not guarantee that they have incorporated organizational membership into their sense of selves. Finally, employees who have an *internalized* attachment feel congruence between their goals and those of the organization.

Factor structures. O'Reilly and Chatman (1986) developed measures of compliance, identification, and internalization. Although they found evidence for a three-component model in their initial study, a later study using a more diverse sample resulted in only a two-component model (Caldwell, Chatman, & O'Reilly, 1990). One of these factors was comprised of the compliance items and the other was comprised of both the identification and internalization items. Sutton and Harrison (1993) discovered a similar two-factor solution with their data. However, one of these factors (compliance) had a low level of internal consistency, calling into question the utility of the scale.

Consequences of commitment. O'Reilly and Chatman (1986) argue that attachments based on compliance will be detrimental to organizational initiatives, while attachments based on identification and internalization will yield more positive outcomes. These hypotheses are supported with respect to turnover intentions. Internalization and identification have been shown to have an inverse relationship with turnover intentions, while compliance has had a positive relationship with this variable (Becker, 1992; O'Reilly & Chatman, 1986). Only internalization and identification were related to actual turnover, however (O'Reilly & Chatman, 1986).

The relationships between internalization, identification, and in-role performance appear to be small or non-significant (Becker, Billings, Eveleth, & Gilbert, 1996). However, these variables do appear to be positively related to extra-role job performance (Becker, 1992; O'Reilly and Chatman, 1986).

Summary

Several years of programmatic research have led to conceptual and methodological advances in the commitment literature. Mowday et al.'s (1982) work summarized many seemingly disparate approaches to studying commitment and resulted in one of the first validated commitment instruments. Meyer and Allen (1984) built upon this work, expanding our understanding of why employees remain with their organizations.

O'Reilly and Chatman (1986) proposed a more novel approach to defining commitment, though their internalization concept is similar to Meyer's and Allen's (1984) affective commitment concept and Mowday et al.'s (1982) approach to commitment (Mowday, 1998).

Factor analytic studies provide initial support for Mowday et al.'s (1982) and Meyer and Allen's (1990) commitment theories. O'Reilly and Chatman's (1986) theory is not supported by this type of evidence, however. Internalization of organizational values may be one basis for an attachment to the organization; attachment based on compliance is less stable.

In reviewing the consequences of commitment, it is clear that commitment- especially affective commitment and internalization- can help organizations predict turnover intentions. The ability of any of the commitment facets to predict actual turnover behavior is less certain, however. In addition, the commitment constructs do little to aid in predicting another important withdrawal behavior, absenteeism.

While no approach to commitment helps to explain in-role job performance well, commitment does appear to relate to extra-role performance. Commitment's link to contextual performance appears to be stronger, again due mostly to the contribution of affective commitment and internalization/identification. Neither normative nor continuance commitment helped to explain the performance of extra-role behaviors.

In summary, affective commitment (similar to attitudinal commitment and internalization/identification) is the only variable with strong, consistent relationships to important organizational outcomes (i.e., turnover intentions, contextual performance). Normative commitment also correlates with these variables, but the relationships are always considerably weaker than those of affective commitment. Since affective and normative commitment tend to relate in the same direction to the same variables, the utility of distinguishing between these facets is questionable. Finally, continuance commitment and

compliance do not appear to relate strongly to many organizational outcomes. If they do, it is always to a much smaller than degree than the other commitment components.

Why? A Return to Basic Construct Explication

As discussed earlier, most commitment theories were developed to understand the psychological bond or attachment between an employee and his or her employer (Allen & Meyer, 1996; Buchanan, 1974; Mathieu & Zajac, 1990; Meyer & Allen, 1997; Mowday, 1998; O'Reilly & Chatman, 1986). However, with the important exception of turnover intentions, most commitment theories fall short in predicting outcomes that should be affected by an employee's psychological attachment to the organization. The thesis of this paper is that basic construct and measurement issues preclude traditional definitions of commitment from adequately assessing the scope of an employee's psychological bond with the organization.

Both Mowday et al.'s (1982) and Meyer and Allen's (1990) definitions of commitment require that the construct have implications for membership decisions. That is, commitment must make it less likely that an employee will leave the organization. The items in their measures reflect this emphasis (see appendix for Meyer and Allen's revised items). For example, 14 out of the 25 items in Meyer and Allen's (1990) commitment measures explicitly refer to staying with or leaving the organization (e.g., "If I left, I'm not afraid of what would happen" and "Jumping from organization to organization is wrong"). If one wishes to solely predict turnover intentions or behavior, then these measures could provide a wealth of information toward that goal. However, as Brown (1996) notes, commitment to continue membership does not guarantee that employees are committed to other aspects of the organization (e.g., organizational goals, missions). In other words, requiring that commitment be linked to intentions to stay results in construct deficiency in understanding the scope of employee-organization linkages. This argument is supported by the fact that the scale with the smallest number of references to membership decisions, affective commitment, is the one that has the strongest and broadest relationship with

organizational outcomes. In addition, Bozeman and Perrewé (2001) conducted a study in which they removed items from the OCQ that involved turnover cognitions. The removal of these items significantly decreased the relationship between commitment and turnover intentions.

O'Reilly and Chatman's (1986) approach to understanding employee-organization bonds is broader in that it searches for bases of psychological attachment as opposed to reasons why people stay with an organization. However, as Becker (1992) and Meyer and Allen (1997) have noted, internalization, identification, and compliance are not really types of psychological bonds; rather, they are more correctly defined as the bases upon which an attachment can be formed. This conceptual distinction, along with the problematic factor analytic results mentioned earlier (e.g., Sutton & Harrison, 1993), still leaves organizational researchers with a need for a broader approach to studying employee-organization attachments.

In summary, if psychological attachments represent a broad orientation to the organization, than they should have implications for more than just membership decisions. For example, they should impact the way employees approach their work, perceive the organization, and perhaps even have ramifications for employee well-being. If researchers and organizations wish to understand the general psychological attachment that an employee has with an organization, and the multitude of consequences of these attachments, a different conceptual approach is needed. Fortunately, an entire body of literature has developed in another realm of psychology which might facilitate this endeavor. Developmental and clinical psychologists, and more recently social and personality psychologists, have developed a theory of interpersonal attachment. Originally developed to explain and study infant and caregiver bonds, the theory has also been used to understand adult bonds in dating and marriage. Recently, attachment theory has also been successfully applied beyond the interpersonal domain to group attachment (Smith, Murphy,

& Coats, 1999). The current study will attempt to extend this work by applying attachment theory to employee-organization bonds.

An Overview of Attachment Theory

Before discussing ways in which adults can be attached to their organizations, an overview of attachment theory is warranted. John Bowlby introduced the concept of attachment in several writings on parenting and infant-caregiver bonds (Bowlby, 1969, 1973, 1988). Bowlby, a child psychiatrist, was concerned with the effects of maternal deprivation and inadequate care on infant development. During his work in this field, he developed an ethologically-based theory of infant-caregiver bonds. According to his theory, an attachment system develops between infants and their caregivers. In this system, infants engage in instinctual proximity-seeking and contact-maintaining behaviors with individuals who provide physical and psychological security. When caregivers are appropriately responsive to infants' needs, the system is in balance. The child then feels safe to explore the world in ways that facilitate social and physical development (i.e., the caregiver provides a secure base from which to explore). Exploration, according to Bowlby, is critical for developing physical, emotional, and social competence.

In addition to providing a secure base from which to explore, a healthy attachment system also serves a protective function. If, during exploration, the child experiences threat or discomfort, he or she knows they can return to their parent for protection (i.e., the caregiver serves as a safe haven). However, primary caregivers are not equally responsive to infants' needs. As a result, some children do not use their caregivers as a secure base from which to explore, or as a safe haven to return to in times of distress. According to Bowlby (1969, 1973, 1988), when this happens, the attachment system is imbalanced and these children will develop insecure attachment styles with their caregivers.

Bowlby (1988) also argued that children develop "internal working models", or mental schemas, of the self and attachment figures. These models consist of beliefs about one's self-worth, and expectations of how responsive an attachment figure will be. Some

children learn to believe that they are worthy of care and attention; others do not. Children also learn whether or not they can depend on others to be accessible and responsive to their needs. The type of attachment should have implications for how infants respond to separation from caregivers (e.g., grief, proximity-seeking) as well as whether or not infants use attachment figures as bases from which to explore the world. While attachment styles can change with experience, there is considerable consistency between attachment styles at infancy and styles later in child development (e.g., Bowlby, 1988; Grossman & Grossman, 1991).

Ainsworth and her colleagues (Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S., 1978) developed the first experimental paradigms of Bowlby's theory. The researchers put infants in a "Strange Situation"-- one in which they were temporarily separated from their primary caregiver (usually the mother) and then reunited. They then systematically observed infants' responses to the separation and reunion, as well as the mothers' responsiveness to their children. A series of several experiments led Ainsworth and her colleagues to identify three types of attachment styles in infants: secure, anxious/ambivalent, and avoidant. Characteristics of these styles are summarized in Table 1.

Infants with a secure style had mothers who were consistently sensitive and responsive to their signals; subsequently, the infants felt secure in exploring their environment. They also appeared appropriately distressed when separated from their caregivers and sought comfort with them upon reunion. Once comforted, they returned to exploration. Infants with anxious/ambivalent attachments received inconsistent attention from their mothers. Sometimes the mothers were unavailable and unresponsive; other times they were intrusive. In turn, these infants were overly concerned with their mother's availability. Their preoccupation with their mothers' attention resulted in reduced or halted exploration. These infants also experienced high levels of distress during separation from their mothers and were difficult to reassure and comfort upon reunion. Lastly, infants with

avoidant styles had mothers who were more rejecting of their infants' needs. Their caregivers tended to deflect or ignore their infants' requests for closeness, especially for close bodily contact. When separated from their mothers, infants with avoidant styles displayed little overt distress and did not seek contact with their caregivers upon reunion. Instead, they shifted their attention elsewhere, using exploration as a way to detach themselves from their mothers.

Attachment in Adulthood

Though Bowlby believed that a child's internal working models persisted into adulthood, researchers did not actually extend attachment research to adult relationships until the late 1980s. Hazan and Shaver (1987) provided one of the first extensions of attachment theory to an adult population. They argued that conceptually, romantic bonds in adulthood are similar to infant-caregiver bonds in childhood. For example, adults often seek physical closeness from others, turn to their partners for comfort, and are distressed by separation or threats to their relationships. Based on Ainsworth et al.'s (1978) work, Hazan and Shaver developed measures of adult attachment styles, and found that they correlated to a variety of outcomes in romantic relationships. For example, they found that adults with secure attachment styles reported high levels of trust, closeness, and happiness in their relationships. Their relationships tended to last longer than those of adults with less secure attachment orientations. Adults with anxious/ambivalent attachments, on the other hand, reported extreme jealousy and obsession with their partners. They also experienced many more emotional highs and lows in the relationships. Finally, adults with avoidant attachment styles reported more fear of intimacy, and the lowest incidence of positive relationship experiences.

Hazan and Shaver's (1987) work has led to a proliferation of research on romantic adult attachments (e.g., Collins & Read, 1990; Feeney, 1998; Kobak & Hazan, 1991; Simpson, 1990). Table 1 provides a summary of the characteristics of adult attachment styles. Secure adults have relationships characterized by trust and intimacy. These adults

believe they are worthy of affection and feel valued by others. They also believe that significant others are accessible, reliable, and well-intentioned. In contrast, adults with anxious/ambivalent styles see others as undependable and unwilling or unable to meet their needs. They feel they are often misunderstood and underappreciated, and report that their emotional needs are not met. They also frequently worry that their partners do not truly love them or that they will abandon them, leading to obsessive preoccupations with their partners' availability. Finally, adults with avoidant attachment styles tend to be emotionally distant and skeptical. They are uncomfortable with dependency in relationships and often feel that others want to be too close. In addition to being very autonomous, these individuals often discount the need for strong attachments in their lives.

While researchers appear to agree that attachment relationships develop between adults, the influence of childhood attachment experiences on adult relationships is still debated. Researchers with a psychoanalytic perspective view the infant-caregiver bond as a "prototype" for later relationships, and thus expect strong correlations between infant and adult attachment styles (Feeney & Noller, 1996; Levitt, 1991). Other researchers (e.g., Shaver & Hazan, 1993) concede that adult attachment relationships may be, in part, influenced by childhood attachment experiences. However, they argue that there are several other forces that are as much, or more, influential on an adult attachment relationship (e.g., the interaction between the adults in the current relationship). Research in which independent measures of both childhood *and* adult attachment styles are gathered is scant; thus, it is difficult to assess either perspective fully. In conclusion, while scholars agree it is appropriate to extend the concepts of attachment to adult relationships, the mechanisms by which childhood attachment influence adults attachment patterns is debatable.

Extensions Beyond Romantic Attachments

Several researchers have extended adult attachment theory beyond the realm of romantic relationships. For example, Mikulincer and Florian (1998) discuss research on

attachment styles and emotional and cognitive reactions to stress. In many stressful situations, including chronic pain, pregnancy, and fear of death, persons with secure attachment styles appear to cope better with stress than do avoidant or anxious/ambivalent adults. They argue that this is due to stronger feelings of personal control and more active support-seeking behaviors in secure adults.

Attachment styles have also been linked to personality characteristics. Collins and Read (1990) and Feeney and Noller (1996) found that secure adults report higher self-esteem than persons with either insecure attachment style. Shaver and Brennan (1992) found that people with avoidant and anxious/ambivalent styles scored higher on scales of neuroticism and lower on extraversion scales than adults with secure attachment styles. Attachment styles have also been linked to psychological disorders, including anxiety disorders (Routh & Bernholtz, 1991), personality disorders (West & Keller, 1994), and depression (Harris & Bifulco, 1991; Parker, 1994).

Types vs. Dimensions

Ainsworth et al.'s (1978) categorical approach of attachment "types" has guided much theory in child and adult attachment research. Ainsworth et al.'s approach presumes that children with each of the aforementioned styles experience qualitatively different behaviors, emotions, and cognitions. However, the assumption that discrete types of attachments exist has recently been challenged (Brennan, Clark, & Shaver, 1998; Fraley & Waller, 1998). Brennan et al. (1998) factor-analyzed items from dozens of attachment instruments, many of which had been developed from Ainsworth et al.'s work. They concluded that most of the items load onto one of two independent factors: anxiety and avoidance. (Incidentally, Brennan et al. also demonstrated that data from Ainsworth et al.'s original studies can also be conceptualized on these dimensions). The anxiety factor assesses concerns about abandonment and rejection, while the avoidance factor taps comfort with dependency and closeness. Brennan et al. also compared the predictive power of the categorical approach to the dimensional approach. They found that a larger

proportion of variance was usually explained when the continuous measures were employed. In their conclusion, Brennan et al. advocated the use of continuous measures in future attachment research.

Brennan et al.'s (1998) suggestion is reinforced in a paper by Fraley and Waller (1998). Fraley and Waller performed a series of taxometric analyses to assess the latent structure of attachment. Taxometric analyses determine whether a construct represents a "naturally occurring type" that is independent from other "types" of the construct (Meehl, 1992, as cited in Fraley & Waller, 1998). They performed analyses on data categorized by attachment type, as well as data categorized by the anxiety and avoidance dimensions. In all their analyses, the results failed to confirm a prototype or categorical approach to attachment. In other words, people placed into different attachment categories do not display qualitatively different attributes. Instead, they display differing levels of the same fundamental attachment dimensions. The authors conclude that individuals' attachment orientations are best conceptualized as the extent to which they exhibit anxiety and avoidance in their relationships.

The conclusion that attachment orientations are best described in a two-dimensional space does not negate the discoveries that researchers have made using Ainsworth et al.'s (1978) attachment types. Brennan et al. (1998) argue that most categorical models fit into the two-dimensional space paradigm. For example, they cite Bartholomew's (1990) classification scheme of secure, preoccupied, dismissing, and fearful attachment styles. Conceptualizing these types on the two attachment dimensions, Brennan et al. argue that the secure individual is one who is low on anxiety and avoidance. Preoccupied people are high on anxiety and low on avoidance. Dismissing individuals are low on anxiety and high on avoidance. Fearful individuals are high on both dimensions. From a conceptual standpoint, therefore, attachment types can be roughly reduced to points on the attachment dimensions. However, classifying individuals according to these types results in a loss of statistical power and potentially reduces the reliability and validity of the scales (Fraley &

Waller, 1998). In summary, research based on attachment types can provide invaluable information for hypothesis formation. However, it is recommended that attachment orientations be described and measured on the two relatively independent dimensions of anxiety and avoidance.

Attachment to Organizations

While no published articles have applied attachment theory to individual-organization relationships, three sets of authors have employed the theory in a work context. Hazan and Shaver (1990) argue that work is the adult equivalent of childhood exploration. That is, they argue that employment is a way for adults to develop perceived competence and to explore the world. In their study of work and love, they found that adults with secure attachment styles (i.e., low on avoidance and anxiety) were more satisfied with how other people viewed them at work. These individuals also had a healthy balance between work and non-work interests. Anxious-ambivalent employees (i.e., high on anxiety) reported that interpersonal concerns often interfered with their work performance and they generally felt misunderstood and underappreciated by their coworkers. Employees with avoidant styles (i.e., high in avoidance) used work in compulsive ways, often reporting that work interfered with their personal relationships. They also felt nervous when they were on vacation or not at work. These results suggest that attachment orientations can affect work-related cognitions and behaviors.

Joplin, Nelson, and Quick (1999) and Quick, Joplin, Nelson, and Quick (1992) have adapted attachment theory measures in the study of employee health. They argued that self-reliant individuals (conceptually analogous to individuals with secure attachment styles), seek more social support in the workplace and experience fewer health problems than individuals with overdependent or counterdependent styles (analogous to anxious/ambivalent and avoidant styles). Their studies generally confirm these hypotheses, though some of Quick et al.'s (1992) attachment style scales suffered from low levels of reliability.

Finally, Johnston (2000) examined whether managers' interpersonal attachment styles (to their parents and spouses) were related to delegation and organizational structure in small business. She found that managers with a secure attachment style were more likely to have decentralized organizations. They also reported less turnover in their companies than did managers with an insecure attachment style.

This research suggest that attachment orientations do affect employees' cognitive and emotional responses in the work context. However, the focus of these studies (and most attachment research) has been on understanding how person-to-person bonds affect individuals. Smith et al. (1999) have recently applied attachment theory beyond this realm to the study of a person-entity bond: group attachment. While they note that attachments between two individuals are different than attachments between individuals and groups (e.g., interpersonal relationships are probably more central to one's life), they argued that there are similarities between the attachments as well. For example, just as people have mental models about interpersonal relationships, so too can they have mental models about their experiences in a group. These working models could be affected by past membership in group situations as well as experiences within the current group setting. Smith et al. developed group attachment measures and found that the measures of attachment anxiety and avoidance explained significant amounts of variance in several group-related dependent variables (e.g., perceived social support, intentions to leave the group). The authors concluded that the attachment perspective enhances the understanding and implications of individuals' psychological ties to groups.

The current study attempts to extend the application of attachment theory to another individual-entity relationship: employees' attachment to their organizations. Many people spend a large portion of their time at work, thus it is logical to conclude that psychological bonds develop between employees and their employers (and with various organizational representatives, such as supervisors and coworkers). It is also plausible that people have internal working models, or schemas, about the responsiveness and dependability of their

organizations. These models should be based upon: past relationships with other employers, as well as current experiences with their employing organization. For example, a person who has been unexpectedly downsized out of a prior organization will probably have a highly anxious attachment with subsequent employers-- they may be overly concerned that new organizations are going to let them go. They may also be more avoidant, not wanting to depend on their organization for a secure job. Working models can be "updated" to incorporate new information about an attachment figure (Kobak & Hazan, 1991; Mikulincer & Arad, 1999); therefore, current experiences with one's employer should affect attachments as well. If an employer is responsive to an employee's needs and requests (e.g., for training and development, work-family issues), then that employee may begin to see the organization as responsive and trustworthy. Employees' mental models should effect the degree of anxiety and avoidance they experience in membership with their current organizations. Their degree of anxious and avoidant attachments should in turn have ramifications for several important employee attitudes, perceptions, and behaviors.

Before proceeding to the formal hypotheses, one caveat deserves mention. As discussed earlier, the influence of childhood attachment experiences on relationships in adulthood is debated. The current does not address whether interpersonal attachments (in childhood or adulthood) influence organizational attachment. The focus of this study is on whether or not employee-organization bonds can be conceptualized as attachment experiences. If this study does suggest that the latter is possible, then future research could address the possible influence of interpersonal attachment on organizational attachment.

Hypotheses

To test the utility of an attachment theory in understanding person-organization bonds, the following relationships were proposed. Predictions in the current study were based on the limited construct explication of Brennan et al.'s (1998) attachment dimensions (i.e., anxiety and avoidance), as well as research predicated on discrete attachment types.

Employee cognitions

Work stress. As discussed earlier, Mikulincer and Florian (1998) concluded that individuals with secure attachment styles coped better with stressful situations than did individuals with anxious/ambivalent styles. An employee with a highly anxious attachment will likely perceive stressful work events as more threatening, irreversible, and uncontrollable. Therefore, it was expected that people with higher levels of attachment anxiety would report more work-related stress than those with lower levels (hypothesis 1).

It was also expected that persons with strong avoidant attachments would experience more work stress (hypothesis 2). Avoidant individuals perceive themselves as extremely self-sufficient and feel little need to rely on others. Since they are likely to isolate themselves from bases of support (Mikulincer & Florian, 1998), highly avoidant employees should experience more stress than individuals with low avoidance orientations.

Perceived organizational support. Perceived organizational support assesses whether employees feel the organization values their contributions and cares about their well-being (Eisenberger, Huntington, Hutchinson, & Sowa, 1986). Hazan and Shaver (1990) found that people with the anxious-ambivalent subtype often reported feeling misunderstood and underappreciated. Therefore, people with high levels of anxiety, who feel underappreciated, should perceive less support than those with lower anxiety levels (hypothesis 3). Smith et al.'s (1999) study supports this prediction. The authors found that attachment anxiety was strongly related to satisfaction with group support, a criterion conceptually similar to perceived organizational support.

Employees with strong avoidant attachments were also expected to perceive lower levels of organizational support (hypothesis 4). Avoidant individuals, according to typological attachment theories, are uncomfortable with dependency because they do not feel they can trust attachment figures to be responsive to their needs. Therefore, a person with an avoidant attachment should be less likely to feel that the organization genuinely cares for him or her.

Turnover intentions. Lastly, it was predicted that highly-anxious employees would have lower turnover intentions than those who were not as anxious (hypothesis 5). People with anxious attachments have a chronic fear of rejection and separation. In contrast, people with low anxiety do not react as dramatically to perceived separation. These individuals are also more confident in approaching new relationships because they generally feel that others will like and approve of them. This may make employees with lower levels of anxiety less frightened of leaving an organization and more willing to seek opportunities elsewhere.

In contrast, it was expected that individuals with high attachment avoidance would have higher turnover intentions (hypothesis 6). Perhaps as a way to prevent any feelings of dependency from forming, highly avoidant individuals are more likely to think about leaving the organization. This logic was supported in Smith et al. (1999) study of group attachment. They found that people with a highly avoidant attachment had stronger group turnover intentions than those with lower avoidance orientations.

Employee performance

In-role performance. According to Brennan et al. (1998), attachment anxiety centers around abandonment concerns. Hazan and Shaver (1990) argued that because highly anxious individuals are so preoccupied with attachment concerns (e.g., gaining approval, feeling secure), their overall work performance should decline. However, Hazan and Shaver were focusing mostly on attachment relationships with romantic partners and coworkers. An employee who is overly concerned with approval from their employer might respond with *higher* work performance in order to gain recognition and security (hypothesis 7). Employees with low levels of anxiety should have fewer of these concerns. While it is not expected that they will perform poorly on the job, their performance might be slightly lower than their highly-anxious counterparts.

With respect to attachment avoidance, employees who have difficulty trusting their organization and who do not want to become too dependent on it should reflect these

orientations in their work performance. Ainsworth et al. (1978) reported that avoidant infants used exploration not as a way to satisfy their curiosity and learn about the world, but as a way to avoid interacting with their mothers. They were also less likely to return to their caregivers in times of distress. If work is the adult equivalent of exploration (Hazan & Shaver, 1990), then employees with highly avoidant attachments to their organization might not perform as well as they are capable of performing. They would be less likely to turn to the organization for assistance in developing products or when problems arose. In turn, they should receive lower supervisory ratings of in-role performance than individuals who do trust the organization and seek its assistance (hypothesis 8).

Contextual performance. In addition to in-role performance, another facet of work performance is contextual performance (a.k.a., prosocial behavior, organizational citizenship behaviors, extra-role performance). Hypothesis 9 predicted a positive relationship between attachment anxiety and contextual performance. In order to feel accepted by the organization and their coworkers, highly anxious employees should engage in a large number of citizenship behaviors (e.g., help others who have been absent, have higher than average attendance). There is no reason to expect that people with low levels of anxiety attachment should not also engage in citizenship behaviors, but perhaps they would do so to a lesser degree than those with strongly anxious attachments.

In contrast, a negative relationship was expected between attachment avoidance and performance of citizenship behaviors (hypothesis 10). Since employees with strong avoidance orientations are not comfortable fostering interdependent relationships, they should not exert extra effort to help their organization or coworkers. In contrast, people with low avoidance concerns maintain a healthy balance of dependency and autonomy. They lean on others and are comfortable having others rely on them. This level of trust and comfort with intimacy should lead these employees to engage in more prosocial behaviors to the organization and its employees.

Attachment vs. Commitment

Many of the criterion variables mentioned thus far have also been studied in commitment research. For example, role ambiguity and role conflict, which are often related to stress (Jackson & Schuler, 1985), relate to affective and normative commitment (Stanley, Meyer, Herscovitch, & Topolnytsky, 2000). Affective and normative commitment are also strongly related to perceived organizational support (Stanley et al., 2000). As discussed earlier, all three facets of commitment have moderate-strong correlations with turnover intentions. Few facets of commitment correlate with in-role performance. However, affective commitment does appear to relate to extra-role performance. Continuance commitment does not relate strongly to any of the aforementioned variables, with the exception, perhaps, of turnover intentions.

The current study argues that knowledge of employees' organizational attachment anxiety and avoidance provides a more complete picture of employee-organizational linkages than knowledge of their commitment levels. To test this assumption, organizational commitment was measured in this study. The predictive utility of the attachment versus commitment measures were then compared. It was expected that attachment constructs would be better predictors than the commitment constructs (hypotheses 11-15).

Chapter 2

METHOD

Participants

Two hundred and eighty-four employed individuals participated in this study. Eighty-one percent of the participants were students enrolled in an undergraduate degree program, the majority of whom were working on a part-time basis. The remaining 19% consisted primarily of individuals employed on a full-time basis. The mean age of the participants in the overall sample was 22.4 years ($SD = 6.4$). Fifty-eight percent of the participants were female; 42% were male. The vast majority of the participants identified themselves as single (87%). Lastly, 3% of the participants identified themselves as African American, 3% as Hispanic/Latino, 1% as Native American, 2% as Asian/Pacific Islander, 4% as Multi-Racial, 86% as Caucasian, and 1% as other.

With respect to employment information, participants worked in a variety of job functions and industries. The most frequently endorsed job functions were other (37%), sales/marketing (34%), and human resources/personnel (8%). Industries ranged from retail sales to information technology, and also included restaurant/food services and the government/not-for-profit industry. Participants in the sample had been working for their current employers an average of 1.6 years ($SD = 1.93$). Their mean annual salary was \$22,699 per year ($SD = \$32,557$).

As the standard deviations suggest, there was considerable variation among the participants on several of the demographic and employment variables. To elucidate the source of these differences, more detailed descriptions of the two primary samples are described below.

Undergraduate student population. As stated earlier, 81% (230) of the overall sample were undergraduate students enrolled in large, public university located in the Western United States. Students were enrolled in a variety of major programs, including business, engineering, and psychology. The mean age in this undergraduate sample was 19 years ($SD = 3.23$). Sixty-two percent of the students were female and 96% classified themselves as single. The proportion of students in various ethnic groups were: 2% African American, 3% Hispanic/Latino, 2% Asian/Pacific Islander, 4% multi-racial, and 89% Caucasian.

With respect to work information, the majority of students (93%) were working part-time. The average tenure with their companies was 1.3 years ($SD = 1.27$). Students reported working in a variety of industries, the most frequently mentioned of which were sales/retail, restaurant/food services, and government/not-for-profit. They also classified their jobs in to several functional areas. The largest proportion of these were assigned to other (43%), sales/marketing (31%), and human resources/personnel (8%). Their reported annual salary was quite variable, with a mean of \$7,965 and a standard deviation of \$6,184.

Non-undergraduate population. Fifty-four participants (19% of the total sample), not enrolled in an undergraduate program, also provided data for this study. Nineteen of these participants were enrolled in a part-time MBA program in the Western United States. The remaining 35 employees were employed at three for-profit organizations. The average age of participants in this sample was 32.6 years ($SD = 6.5$). Fifty-six percent of the participants were male; 43% were female. A little more than half of these participants (55%) were married. Eighty-two percent of the participants identified themselves as Caucasian, while 4% classified themselves as African American, 6% as Native American, 2% as Asian/Pacific Islander, 4% as Multi-Racial, and 2% as other.

The vast majority of these participants were working full-time (94%). Their average tenure with their employers was 2.8 years ($SD = 3.3$). Participants worked in a

variety of industries, including consulting, non-for-profit industry, and information technology. They classified their jobs into several functions, with the largest percentage working in sales/marketing (44%), other (13%), engineering (11%), and research and development (11%). Finally, the average annual salary for this group was \$74,418. However, there was considerable variability in salaries as the range was \$132,000 and the standard deviation was close to \$35,000.

Measures

A reformatted copy of the undergraduate student's survey is presented in the appendix. With the exception of the demographic variables, participants rated all items on a 7-point Likert scale with endpoints appropriate to the wording of the item.

Organizational attachment. An 22-item organizational attachment scale was developed for this study. The items were modified versions of many of the items in Brennan et al.'s (1998) adult attachment scale, which was designed to assess romantic attachment. For many of the revisions, the items were modified by replacing the word "partner" with "organization" (e.g., I feel comfortable depending on my organization). Some items were not appropriate for employee-organization relationships and were thus not included. For example, the statement "I get frustrated when my organizations is not around as much as I would like" is not appropriate because an organization, as a structure, cannot be physically unavailable. Finally, some items were modified to make the employment relationship clear. For example, "I worry a fair amount about losing my partner (organization)" was changed to "I worry a fair amount about losing my job with this organization."

The revisions resulted in eleven items for each subscale. Sample items for the anxiety subscale include "I need to be reassured that my organization values me as an employee" and "I often worry that my organization won't want me as an employee anymore". Sample items for the avoidance subscale include "I don't want to become too

attached to this organization” and “It helps to turn to my organization in times of need” (reverse-scored).

Organizational commitment. Meyer, Allen, and Smith’s (1993) measures of affective, calculative, and normative commitment were included in the employee survey. Each scale contains six items. A sample affective commitment item is “I would be very happy to spend the rest of my career in this organization”. An example of a continuance commitment item is “Right now, staying with this organization is a matter of necessity as much as desire”. A sample normative commitment item is “I do not feel any obligation to remain with my current employer” (reverse-scored). Meyer and Allen (1997) report the following median reliability estimates (across dozens of studies) for these scales: .85 for affective commitment, .79 for continuance commitment, and .73 for normative commitment.

Work stress. A 15-item “Stress in General” scale (Fisher, Stanton, Thoresen, Julian, Sinar, Aziz, Balzer, & Smith, 2000; Stanton, Balzer, Smith, Parra, & Ironson, 2000) served as the stress measure. The measure provides scores for two dimensions of work stress: pressure and threat. The pressure scale assesses an employee’s perceived levels of typical daily pressures. Employees were asked, for example, how demanding or calm they feel their jobs to be. The threat scale assesses more serious or overwhelming degrees of stress. For example, two questions asked how irritating or overwhelming employees find their jobs to be. Reliabilities for the pressure scale range from .73 to .86 and from .77 to .83 for the threat scale (Stanton et al., 2000).

Perceived organizational support. A shortened version of Eisenberger et al.’s (1986) perceived organizational support (POS) scale was completed by the employees. Nine items with the highest factor loadings on the POS scale were retained for this survey. Sample items include “The organization really cares about my well-being” and “Even if I did the best job possible, the organization would fail to notice” (reverse-scored).

Turnover intentions. Turnover intentions were assessed with two of three items presented by Konovsky and Cropanzano (1991). The items are, “How often do you think about quitting your job at this organization?” and “If it were possible, how much would you like to work for a new organization?”.

Performance. Supervisors provided ratings of in-role performance as well as organizational citizenship behavior (OCB). Williams and Andersen’s (1991) measure was used to assess the performance dimensions. Their scale includes a 7-item measure of in-role performance ($\alpha = .91$). A sample item is “Employee meets formal performance requirements of the job”. The OCB toward the organization scale includes six items ($\alpha = .75$) and the OCB toward individuals scale contains seven items ($\alpha = .88$). Sample items for each scale are “Employee takes undeserved work breaks” (reverse-scored) and “Employee helps others who have been absent”, respectively.

Employees also provided self-ratings of performance. Two items from Meyer et al. (1993) were employed. The in-role performance item asked the participant to rate their overall daily job performance, while the contextual performance item asked the participant how often they go beyond what is required of them on the job.

Procedure

The general procedure for all participants was for the primary researcher to administer the employee survey in person or via e-mail. Participants then voluntarily gave their supervisor the supervisory survey, or gave the primary researcher permission to contact their supervisor. If a participant gave permission, supervisors were then sent a supervisory survey.

Employee surveys were administered in person to participants in the undergraduate sample. These participants either received extra credit for their participation, or credit for required research participation. After they had completed their surveys, all participants were given an envelope with a letter and a survey for their supervisors. The contents of the

envelope were explained and the participants were asked to give the envelope to their supervisors. However, the participants were told that they would not be penalized if their supervisors chose not to respond. One hundred and ten supervisors returned surveys. This constitutes 48% of the administered supervisory surveys in this sample. It is impossible to know whether the remaining 52% of the surveys were not given to the supervisors and/or whether they were given but not returned. However, a comparison of the participants whose supervisors returned surveys with those whose supervisor did not return them revealed no significant differences on any demographic variable.

The participants in the part-time MBA program were students in two different evening classes. In one class, the surveys were administered and collected on the same date. In the other class, the surveys were collected one week after administration. Of the 40 surveys that were disseminated, 19 surveys were returned, constituting a 48% response rate. At the end of the survey, participants were asked if the researcher could contact their supervisor. If they agreed, they were also asked to provide their supervisors' contact information. One participant (5%) stated that she did not have a supervisor. Of the remaining participants, the majority (68%) did not give their permission to contact a supervisor. Six participants (32%) did give their permission, however. A comparison between the individuals that did give permission to contact their supervisors and those who did not revealed no significant demographic differences. Five of the six supervisors returned a supervisory survey, for an 83% return rate.

In the organizational samples, representatives of upper management were first contacted to obtain permission to survey the companies' employees. After upper management approval was given, the organizational employees were contacted via e-mail. Each employee received a message describing the study, its voluntary nature, and a survey as an attachment. They were told they could return the survey via e-mail, or via regular mail. Across organizations, the response rate was 56% (i.e., 35 out of 63 employees responded). Twenty-one of the respondents (60%) gave their permission for the researcher

to contact their supervisor. No significant demographic differences existed between those who gave permission to contact their supervisors and those who did not. Supervisors were also contacted by e-mail and ten (48%) responded to the supervisory survey.

Analyses

Confirmatory factor analyses were performed on the attachment scales to assess the structure of the anxiety and attachment dimensions. Hypotheses 1-10 were evaluated by regressing the criterion variables on attachment anxiety and avoidance. To evaluate hypotheses 11-15, the three commitment measures and the two attachment measures were entered into two sets of hierarchical regression analyses. In the first set of analyses, the commitment measures were entered as a block in step 1, while the attachment measures were entered as a block in step 2. This analysis investigated the effect of the attachment variables after controlling for the effects of commitment. Next, the variables were entered in the opposite order to determine if the commitment measures were useful predictors after the effects of attachment anxiety and avoidance were taken into account.

Chapter 3

RESULTS

Factor structure of the attachment items

A confirmatory factor analysis (CFA) was conducted to determine whether a two-factor model of anxiety and avoidance would fit the data. Two nested models were compared. Model 1 (see Figure 1) was a single factor model in which all 22 items loaded onto one “attachment” construct. Model 2, the proposed model, was a two-factor model in which the anxiety items loaded onto one factor and the avoidance items loaded onto a second factor (see Figure 2).

The CFA results are presented in Table 2. Applying conventional cutoff standards (Kline 1998; Thompson, 2000), the CFI (comparative fit index) and NFI (normed fit index) levels suggest good fit for both the one- and two- factor models. The RMSEA (root mean squared error of approximation) levels for both are slightly higher than desirable, with the two-factor model having a better approximation level. Using more stringent criteria recommend by Hu and Bentler (1999), the two-factor model has acceptable fit according to the CFI, near acceptable fit according to the NFI, and somewhat acceptable fit using the RMSEA. The one-factor model would be rejected entirely using the more stringent fit criteria. Finally, a chi-square difference test provides additional evidence that the two-factor model better fits the data ($\chi^2_{diff} = 188.96, p < .001$). Therefore, the two-factor model was used for all subsequent analyses.

Hypotheses 1-6: Predicting Employee Cognitions

Preliminary analyses. Variable means and standard deviations are presented in Table 3. Reliability estimates and intercorrelations among the variables are presented in Table 4. One item on the supervisory in-role performance scale has a substantial amount of

missing data (i.e., more than 20% of the supervisors did not respond to it). Upon reviewing the item and supervisor comments about it, the item appeared to be unclear and was dropped from the scale. In addition, one item on the supervisory OCB-organization scale had an extremely skewed distribution. The item asked about employee absenteeism, a low-base rate behavior (Hulin, 1991). Because this item was substantially reducing the overall reliability of the measure, it was dropped from the scale. After these changes were made, all but one of the variables had reliability coefficients above .70 and were thus acceptable for research purposes (Nunnally & Bernstein, 1994). The remaining scale, continuance commitment, had a reliability coefficient of .63; thus, caution should be used when interpreting relationships with this scale.

As shown in Table 4, several of the relationships proposed in hypotheses 1-8 were in the expected direction. As predicted, three of the four work stress variables were positively correlated with the attachment measures. In addition, both attachment variables were negatively correlated with perceived organizational support. In contrast to the expected relationship, however, attachment anxiety was positively related to turnover intentions, not negatively related. Finally, attachment avoidance did not correlate significantly with turnover intentions.

Work stress. Hypotheses 1 and 2 predicted positive relationships between work stress and attachment anxiety and avoidance. When the stress scales were regressed on each of the attachment variables (see Table 5), these hypotheses were largely confirmed. Attachment anxiety and avoidance explained 18% of the variance in work threat, and both variables were significant predictors of the criterion ($B = .30$, $B = .23$, respectively). The variables explained four percent of the variance pressure, the second stress scale. However, attachment avoidance was the only significant predictor in the equation ($B = .18$).

Perceived organizational support. Fifty-four percent of the variance in POS was explained by the attachment measures. Hypothesis 3 was supported in that attachment

anxiety had a strong, negative relationship with the criterion ($B = -.71$). Hypothesis 4 was partially supported. Attachment avoidance was also negatively related to POS ($B = -.07$), but the relationship was only marginally significant.

Turnover intentions. Hypothesis 5 predicted a negative relationship between turnover intentions and attachment anxiety, while hypothesis 6 predicted a positive relationship between turnover intentions and attachment avoidance. Though the variables explained 27% of the variance in this criterion, the relationships of the predictors were not in the expected direction. Attachment anxiety had a strong positive relationship with turnover intentions ($B = .53$), whereas attachment avoidance was not significantly correlated with the criterion.

Hypotheses 7 - 10: Predicting Employee Performance

Preliminary analyses. Both in-role and contextual performance were measured in two ways. Self-report ratings of in-role performance and organizational citizenship behaviors (OCB) were collected. In addition, supervisors provided ratings of in-role performance, OCB to the organization, and OCB to individuals within the organization. The correlations presented in Table 4 provide mixed initial support for hypotheses 7 - 10. Attachment anxiety was related to in-role performance (self-report) and contextual performance (self-report), but in the opposite direction of what was predicted. Attachment avoidance (self-report) was negatively related to in-role performance as expected, but not related to OCB (self-report). Only one of the supervisor-report measures was related to a predictor. This was a negative relationship between attachment anxiety and OCB-individuals, a correlation in the opposite direction of what was expected.

In-role performance. The regression results, presented in Table 5, provide a stronger test of hypotheses 7 and 8. Hypothesis 7 predicted a positive relationship between attachment anxiety and in-role performance, while hypothesis 8 predicted a negative relationship between attachment avoidance and this criterion. For the self-report of in-role

performance, the variables explained three percent of the variance in the criterion.

Attachment anxiety was a marginally significant predictor in the equation ($B = -.11$), but was related to the criterion in the opposite direction of what was expected. Attachment avoidance related negatively to the self-report of in-role performance ($B = -.12$).

The variables explained only 2% of the variance in the supervisor-report of in-role performance, and the overall equation was non-significant. Attachment anxiety was marginally related to the criterion ($B = -.16$), while attachment avoidance did not correlate with the criterion at all.

Organizational citizenship behaviors (OCB). The regression results for OCB closely mirror those of the in-role performance criterion. For the self-report measure of OCB, the predictors explained a significant amount of variance (6%) in the criterion. Both variables were significant predictors of the criterion, though the relationship between attachment anxiety and OCB (self-report) was in the opposite direction of what was predicted ($B = -.25$). In addition, attachment avoidance was marginally related to the criterion, and the relationship was in the opposite direction of what was predicted ($B = .09$).

The attachment measure did not explain a significant amount of variance in the supervisor report of OCB to the organization. In contrast 8% of the variance in OCB to individuals was explained by the model. However, only attachment anxiety was related to this criterion ($B = -.30$), a relationship in the opposite direction of what was expected.

Hypotheses 11-15: Attachment vs. commitment

Hypotheses 11-15 predicted that the attachment measures would be more efficacious predictors of the study's criteria than the commitment measures. To test these predictions, two sets of hierarchical regressions were conducted. In the first set, the commitment measures were first entered as a block, followed by the attachment measures in the second step. This allowed for an assessment of the utility of the attachment measures in predicting the study's criteria beyond the effect of the commitment measures. If the

hypotheses were correct, then the attachment measures should predict additional variance in the criteria beyond the effects of commitment.

The predictor blocks were entered in reverse order in the second hierarchical regression. If the attachment measures are indeed better predictors, then the addition of the commitment measures should *not* predict additional variance in the criteria. In addition, the final beta weights for the attachment measures should be significant, while the commitment measure beta weights should be non-significant.

Attachment beyond commitment. Table 6 presents the results from the hierarchical regressions. Final beta weights are presented, as well as changes in R^2 from step 1 to step 2 for each model. For all four employee cognition criteria, the addition of the attachment variables explained a significant amount of additional variance (changes in R^2 ranged from .02 to .12). For the performance criteria, the attachment measures predicted additional variance in the self-report measure of in-role performance (change in $R^2 = .04$), but not in the self-report measure of organizational citizenship behaviors. Finally, for all of the supervisor-report measures of performance, neither the commitment nor the attachment blocks explained a significant amount of variance in the criteria.

Commitment beyond attachment. In the second set of hierarchical regression analyses, attachment measures were entered first, followed by the commitment measures. As shown in Table 6, the commitment measures did not add additional variance in prediction of the first stress variable, threat. However, they did explain an additional 4% of the variance in the second stress variable, pressure. In reviewing the final beta weights, both attachment anxiety and avoidance were important predictors of threat ($B = .27$; $B = .25$, respectively) and pressure ($B = .22$; $B = .17$, respectively). For the commitment measures, only normative commitment was a significant predictor of threat ($B = -.18$) and only affective commitment emerged as a significant predictor of pressure ($B = .30$).

Perceived organizational support was also predicted by both blocks of variables in the second regression. The commitment measures predicted an additional 8% of the

variance beyond the 54% predicted by the attachment measures. Attachment anxiety ($B = -.39$), attachment avoidance ($B = -.16$), affective commitment ($B = .30$), and normative commitment ($B = .16$) were significant predictors of POS. Results are similar for the final employee cognition, turnover intentions. Commitment explained an additional 13% of variance in the criterion, and attachment anxiety ($B = .18$), normative commitment ($B = -.36$), and affective commitment ($B = -.17$) emerged as significant predictors.

For the self-report measures of performance, the addition of the commitment measures after the attachment measures did not explain a significant amount of additional variance in in-role performance. However, in the final equation, attachment avoidance ($B = -.17$), affective commitment ($B = -.17$), and normative commitment ($B = -.17$), emerged as significant predictors. The commitment measures explained a marginally significant amount of incremental variance in OCB (self-report), but only attachment avoidance ($B = .12$), and continuance commitment ($B = -.14$), emerged as useful predictors. Finally, as found with the first set of hierarchical regression analyses, supervisor reports of in-role performance and OCB-organization were not predicted well with any block of variables. OCB-individuals had a significant amount of variance explained when the attachment measures were entered first (change in $R^2 = .08$, see Table 6), but no one predictor emerged as significant in the equation.

Summary

Overall, the results suggest that the attachment framework is useful for conceptualizing employee-organization bonds, and in predicting several work outcomes. When measured with organizational commitment, both constructs were important in predicting employee cognitions. However, overall, performance was not predicted very well. No variable was consistently related to any measure of in-role or citizenship behavior, though attachment variables and commitment variables were significant in several equations.

Chapter 4

DISCUSSION

The primary goals of this study were two-fold: 1) to determine if the attachment framework can be applied to the realm of employee-organization relationships, and 2) if so, to compare the utility of attachment constructs in predicting important work outcomes relative to a more established work construct, organizational commitment. Confirmatory factor analyses supported the first goal. A measurement model of attachment, in which organizational attachment avoidance and anxiety emerge as two unique factors, was confirmed. The fit indices did suggest that there was room for improvement in the measures, however. An examination of the individual item factor loadings revealed that certain items were better explained by the factors than others, especially for items related to attachment anxiety. Revisions of these items and construction of new ones is strongly warranted in future research. Brennan et al.'s (1998) items, and a recent item-response theory analysis of adult attachment measures by Fraley, Waller, and Brennan (2000), would facilitate this endeavor.

Interestingly, the two factors that emerged in the CFA correlated .48 with one another. This is consistent with Smith et al.'s (1999) research, but not with the research of Brennan et al. (1998). In their study of group attachment, Smith et al. reported factor correlations ranging from .55 to .62 between group attachment anxiety and avoidance. Brennan et al., however, in their scale development study, found a much smaller correlation of .12 between romantic attachment avoidance and anxiety. The differences in the correlations may be due to the varying analytical techniques employed in each study. Brennan et al performed a principal components analysis, Smith et al. report a principal components *factor* analysis, and the present study used a confirmatory factor analysis.

Each of these analytical techniques treats variance between the items in different ways. However, given the magnitude of the differences (i.e., almost no correlation between the factors to substantial ones), other explanations should also be explored.

One possibility is that the relationship between attachment anxiety and avoidance varies on the context of the attachment relationship. For example, in romantic attachments the dimensions appear to be uncorrelated. A person who is highly anxious in the relationships may or may not be avoidant as well. In group and organizational attachment, the dimensions appear to be more highly correlated, however. This suggests that as a person experiences more attachment anxiety in these relationships, s(he) would also be more likely to experience attachment avoidance (and vice-versa). Why the dimensions would be correlated for one area of social functioning and not another is an important avenue for future inquiry. The proposed answers would impact both theory-building and practical interventions. For example, if the dimensions are in fact correlated, the current study would have made similar predictions for each attachment dimension instead of (some) differential ones. The conclusions would have been dramatically different as well. Practical interventions are also impacted. If attachment avoidance and anxiety are highly correlated, then an attempt to modify the behaviors of one insecure attachment style would also effect the other insecure attachment behaviors. On the other hand, if the factors are not correlated, then attempts to modify problematic cognitions and behaviors would need to address each insecure attachment orientation independently. Clearly, research which investigates the relationships between attachment anxiety and avoidance in multiple contexts is warranted.

Once the measurement model of organizational attachment was confirmed, the relationships between attachment anxiety, attachment avoidance, and the study's work outcomes were explored. Attachment orientations related to some of the organizational outcomes as expected, but not to others. Both attachment anxiety and avoidance were positively related to stress and negatively related to perceived organizational support. The

dynamics of these relationships merit further study as stress and POS are linked to several important worker behaviors and outcomes. For example, stress is linked with poorer physical and mental health, as well as higher absenteeism and turnover (Kahn & Byosiere, 1992). Organizations can cause or exacerbate stress in many ways, including poor communications, role ambiguity and conflict, and non-participative management (Kahn & Byosiere, 1992). Individuals with insecure attachment styles might respond more negatively to these conditions (i.e., attachment style would serve as a moderator) and thus experience more manifestations of stress. The dynamics between organizational attachment, stress, and perceived organizational support merits future research.

In contrast to the confirmed relationships with POS and stress, the hypotheses regarding turnover intentions were not confirmed. Instead of a negative relationship between turnover intentions and attachment anxiety, a positive association arose between these variables. In addition, the relationship between attachment avoidance and turnover intentions was not significant. The latter relationship is surprising as research in other domains (e.g., romantic attachments, group attachment) has found a positive association between avoidant attachments and plans to leave the relationship (e.g., Smith et al., 1999). However, in this study neither the bivariate correlation nor the regression results resulted in a significant relationship between avoidance and turnover intentions. The avoidance measure had a smaller standard deviation than most of the other variables; therefore range restriction in the predictor might be the culprit. However, attachment avoidance did correlate with other outcomes measures, so this explanation is unlikely. A theoretical possibility is that in an organizational context, attachment avoidance does not play a strong role in the development of turnover intentions. Caution should be used in drawing any conclusion, however, since the results of this study contradict most of those found in other attachment domains. Further work on attachment in an organizational context will show whether or not this is a stable relationship.

Regarding attachment anxiety and turnover intentions, a negative relationship was expected. This hypothesized relationship stemmed from research which shows that people with anxious attachments have a strong desire for intimacy coupled with a chronic fear of rejection and separation (Hazan & Shaver, 1987; Shaver & Hazan, 1993; Brennan & Shaver, 1995). The results did not support this hypothesis, however. Instead, a strong positive relationship emerged. Interestingly, research in group and relationship attachment is more consistent with these results. Upon reviewing these studies, there appears to be a disconnect between the desires of anxiously attached individuals and the outcomes that ensue in their relationships. Anxious individuals, though they desire closeness and intimacy, report less satisfaction with, commitment to, and support in their relationships (Simpson, 1990; Shaver & Hazan, 1993; Brennan & Shaver, 1995). These psychological states should theoretically lead to faster dissolution of the relationship. Smith et al. (1999) did in fact find a positive relationship between attachment anxiety and plans to leave the group. Therefore, as Simpson (1990) explains, even though anxious individuals desire stable, close relationships, their insecurity about the relationships appears to prevent them from developing healthy, long-lasting attachments.

Finally, the relationship between attachment and performance were generally unconfirmed. The relationships that did emerge between the variables generally suggested a negative relationship between either attachment style and performance variables. Though a positive relationship between attachment anxiety and performance was expected, the negative relationships that emerged are more consistent with the work of Hazan and Shaver (1987). They found that anxious individuals report that relationships often interfere with work, and that they are motivated by approval rather than achievement. When approval does not come or is withdrawn, then their motivation to perform decreases. Interestingly, the Hazan and Shaver study assessed how *interpersonal* attachment styles impact work outcomes. This study, and other studies assessing organizational commitment, was designed to assess the impact of *organizational-focused* variables on performance. To the

extent that in-role and extra-role job performance is impacted by organizationally-determined variables, than organizational attachment might impact performance. However, research on foci of commitment and foci of justice suggest that variables more immediate to employees' work situations have the strongest impact on performance (Becker et al., 1996; Becker & Kernan, 2001; Bishop, Scott, & Burroughs, 2000; Cropanzano, Prehar, & Chen, in press). For example, Becker and Kernan (2000) found that supervisory commitment, not organizational commitment, predicted performance. A similar result was found in a justice study by Cropanzano, Prehar, and Chen (in press) in which interactional justice, not procedural justice, was the strongest predictor of performance ratings. Therefore, researchers studying the impact of orientations to the organization might better focus their efforts by searching variables more directly affected by organization-wide procedures.

Attachment and commitment. The second goal of this study was to compare the efficacy of the attachment constructs to commitment constructs in predicting various work outcomes. This investigation was motivated by apparent construct deficiencies in commitment theory, as well as to a lack of empirical evidence for (some) expected relationships. It was proposed that current measures of commitment do not fully assess the relationship that an employee has with his or her organization. The concept of attachment was applied as a competing way to assess the type of psychological linkage employees have with their organizations. Therefore it was expected that attachment would be a stronger predictor of the study's outcomes than commitment. Overall, this expectation was not met. Instead, *both* organizational attachment and organizational commitment emerged as important predictors of most of the study's criteria. This suggests that each construct measures a somewhat different aspect of the an employee's relationship with the organization. In other words, commitment and attachment may be subsets of a larger employee-organization linkage construct. Reviewing the theory and scale development behind each construct, attachment may be assessing information about the organization's

trustworthiness and dependability, while commitment is assessing a degree of how much liking one has for the organization and obligation toward remaining with it. (Continuance commitment rarely emerged as a significant predictor and is therefore not discussed).

Though not proposed for investigation in this study, relationships between attachment and commitment did emerge. Attachment anxiety was strongly, inversely related to affective and normative commitment, while attachment avoidance was positively associated with continuance commitment. These relationships make theoretical sense. A person who is distant from the organization, prefers autonomy, and does not want to become dependent on anything (avoidant attachment) should form a more economic, calculated relationship with the organization (continuance commitment). Employees who are intensely preoccupied about their relationship with the organization, and who are strongly dissatisfied with that relationship (anxious attachment), should therefore feel less liking for the company (affective commitment) and less obligated to stay with it (normative commitment). Commitment and attachment have also been related in the study of romantic relationships (Simpson, 1990), though a unidimensional commitment measure is generally used. Further research could explore these relationships, such as whether attachment is a precursor to commitment, or a moderator or mediator of commitment-outcomes relationships.

Methodological Limitations

Several limitations should be noted when interpreting these results. First, the reliability of the continuance commitment scale was low. This may have attenuated the relationship between continuance commitment and the other variables. It is unclear why the scale was less reliable in this study. Allen and Meyer (1996) report an average coefficient alpha of .79 across dozens of studies for the scale, and the estimate did not go below .69 in any of the studies they reported. The current study differed from many of the studies Allen and Meyer reviewed in that it contained responses from several employed undergraduate students. However, a comparison of the undergraduate sample to the non-undergraduate

sample revealed no significant differences in the scale's reliability ($\alpha=.62$ vs. $.64$, respectively). Nonetheless, conclusions about the relationship between continuance commitment and the study's outcomes should be made with caution.

Another methodological limitation concerns the sample size for the supervisor-report measures of performance. The lower number of supervisor reports relative to the number of participants may have reduced the power of detecting relationships that truly existed. (Though see discussion above for an alternative viewpoint). As discussed in the methods section, participants from whom a supervisor-report was obtained did not differ significantly on any demographics from participants who did not have a supervisor-report measure. However, small differences between these groups on some of the study's substantive variables emerged. Participants for whom supervisor reports were not received reported higher perceptions of pressure and threat, and lower perceptions of perceived organizational support. *Post-hoc* hierarchical regression analyses were conducted which controlled for these differences. The results did not significantly change, however, suggesting that the lower supervisory return rate is not a function of differences in the sample.

The use of non-self report measures was intended to reduce another methodological shortcoming: common method bias. Except for the supervisor ratings, all of the measures were self-report and collected at the same time. This may have inflated the observed relationships. However, the correlations among the self-report variables ranged from $.00$ to $.77$, and differential relationships existed between some of the predictors and criteria. If no true relationships existed, then method bias would have inflated all of the relationships by roughly similar amounts. Therefore, though method bias may have affected the observed relationships, it is not likely the sole cause of the obtained correlations.

Another important concern in this study is one of causality. The design was cross-sectional as predictor and criterion measures were collected at the same time. Though the results are consistent with a causal model (e.g., feelings of insecurity lead to more stressful

experiences), causality cannot be inferred from the present data. More powerful designs are needed to explore the causal relationships between attachment, commitment, and work outcomes. While an experimental design in which attachment is manipulated might be ethically questionable, quasi-experiments and longitudinal research would be valuable ways to explore the dynamics of these relationships.

A final consideration in this study concerned the nature of the sample. Over 80% of the participants were students working part-time while attending school full-time, calling into question whether these results generalize to a full-time work force. A recent meta-analysis (Thorsteinson, 2000) concludes that there are few differences between part- and full-time employees on job satisfaction, organizational commitment, or intentions to leave. However, these conclusions may not generalize to our results as few of the studies which compare part-time to full-time employment involve college students. Feldman (1990) argues that part-time workers are not a homogenous groups and identified several dimensions on which part-time work may vary. The part-timers in this study worked primarily in retail sales and the restaurant industry, jobs which are likely temporary and which underutilize their full range of skills. These employees probably differ considerably from part-time employees who are permanent employees and for whom part-time work is their main line of work. *Post-hoc* comparisons between the full-time and part-time employees in this study did reveal differences, in contrast to what the meta-analytic result would predict. For example, students reported less stress, lower affective commitment, higher continuance commitment, and lower citizenship behaviors than full-time workers. However, their mean levels of attachment anxiety, avoidance, turnover intentions, and performance did not differ. If these mean differences affected the rank-order of the correlations, then the results might not generalize to other classes of workers. Further work on organizational attachment should strive to include larger numbers of full-time workers, temporary workers, etc. to explore the nature of the constructs in other work arrangements.

Implications for Practice

Notwithstanding the limitations discussed above, the results of this study suggest several tentative practical implications. From a practical standpoint, these results would suggest that if organizations wish to understand and change employee stress, turnover intentions, or perceived organizational support, then knowledge of both their commitment and attachment orientations would be useful. Meyer and Allen (1997) review several possible human resource practices that can impact employee commitment, including recruitment and selection, training, performance assessment, and compensation. They argue that the most direct way to manage commitment is by influencing employee perceptions. For example, interventions or policies which affect employees' perceptions of self-worth should effect their affective commitment. A promotion-from-within policy is one way to positively affect perceptions of self worth (Meyer and Allen).

Similar to organizational commitment, interventions geared toward changing attachment might also focus on modifying cognitive structures: the internal working models a person has about the organization. (Incidentally, this is similar to the goal of clinical interventions with clients. See, for example, Dozier & Tyrrell, 1998, and Sperling & Lyons, 1994). To review, internal working models include beliefs about one's self worth in the relationship (as an employee) and expectations of how responsive an attachment figure (the organization) will be. According to attachment theory, the goal of any organization would be to engage in behaviors that lead to secure internal working models in their employees. This could be accomplished by organizational initiatives that communicate consistency, dependability, and responsiveness. For example, new employees often enter an organization with a host of previous employee-organizational experiences. Many of these experiences may have been negative ones (e.g., downsizing, being passed up for a promotion), which lead them to approach the new organization with insecurity. Positive experiences in recruitment and socialization might slowly modify insecure working models in these new employees.

Managerial training and coaching could also be impacted by an application of attachment theory. Managers' current view of their subordinates could be explored to determine if there are consistent themes of distrust, incompetence, etc. Subordinates could also be interviewed to determine if they view their supervisor as intrusive or unreliable (anxious attachment behaviors) and/or as unavailable and cold (avoidant attachment behaviors). In the analysis phase, the coach/consultant would also strive to elicit behavioral examples to buttress these perceptions. Coaching would then focus on ways in which the manager could behave that communicate consistency and attentiveness. The analysis might suggest other changes as well. For example, a manager who is perceived as very avoidant might be encouraged to establish a mentoring relationship, through which the person could have a corrective attachment experience. The benefits of experiencing trust and interdependence would then hopefully spill over into the manager's other employment relationships.

Attachment theory could also inform broader organizational assessment initiatives. For example, if an organization is experiencing high turnover rates, they might conduct exit interviews aimed at identifying organizational actions which were perceived as very inconsistent or unresponsive. For example, if an employee perceived that compensation and promotions were distributed unfairly, then this might have contributed to the development of an anxious attachment style with the organization. Another employee, who felt that his bids for more family-friendly policies were rejected, might have developed an avoidant attachment style. In either case, attachment theory framework could help organizations understand reactions to such policies, and suggest avenues for systemic change.

Conclusion

In conclusion, this study provides a launching pad for future research on organizational attachment. The results suggest that attachment is a useful concept for understanding employee cognitions and behaviors. Employee concerns about

trustworthiness and dependability in relationship to their organization appear to be one way of understanding employee-organization linkages. In conjunction with organizational commitment, prediction of these linkages is enhanced even more. If the theory continues to inform thinking about employee-organization bonds, then practical interventions will demand attention as well.

REFERENCES

- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). Patterns of attachment: A psychological study of the strange situation. Hillsdale, N. J.: Lawrence Erlbaum Associates, Inc.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. Journal of Occupational Psychology, *63*, 1-18.
- Allen, N. J., & Meyer, J. P. (1996). Affective, continuance, and normative commitment to the organization: An examination of construct validity. Journal of Vocational Behavior, *49*, 252-276.
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. Journal of Social and Personal Relationships, *7*, 147-178.
- Becker, H. S. (1960). Notes on the concept of commitment. American Journal of Sociology, *66*, 32-42.
- Becker, T. E. (1992). Foci and bases of commitment: Are they distinctions worth making? Academy of Management Journal, *35*, 232-244.
- Becker, T. E., Billings, R. S., Eveleth, D. M., & Gilbert, N. L. (1996). Foci and bases of employee commitment: Implications for job performance. Academy of Management Journal, *39*, 464-482.
- Becker, T. E., & Kernan, M. C. (2001, April). Affective and continuance commitment and performance: A closer look. Paper presented at the 16th annual conference of the Society of Industrial and Organizational Psychology, San Diego, CA.
- Bishop, J. W., Scott, K. D., & Burroughs, S. M. (2000). Support, commitment, and employee outcomes in a team environment. Journal of Management, *26*, 1113-1132.
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt, & W. C. Borman (Eds.), Personnel selection in organizations (pp. 71-98). San Francisco: Jossey-Bass.

- Bowlby, J. (1969). Attachment and loss: Attachment. New York: Basic Books.
- Bowlby, J. (1973). Attachment and loss: Separation: Anxiety and anger. New York: Basic Books.
- Bowlby, J. (1988). A secure base: Clinical applications of attachment theory. London: Routledge.
- Bozeman, D. P., & Perrewé, P. L. (2001). The effect of item content overlap on organizational commitment questionnaire-turnover cognitions relationships. Journal of Applied Psychology, *86*, 161-173.
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Stevens, and W. S. Rholes (Eds.), Attachment theory and close relationships (pp. 46-76). New York: The Guilford Press.
- Brennan, K. A., & Shaver, R. P. (1995). Dimensions of adult attachment, affect regulation, and romantic functioning. Personality and Social Psychology Bulletin, *21*, 267-283.
- Brown, R. B. (1996). Organizational commitment: Clarifying the concept and simplifying the existing construct typology. Journal of Vocational Behavior, *49*, 230-251.
- Buchanan, B. (1974). Building organizational commitment: The socialization of managers in work organizations. Administrative Science Quarterly, *19*, 533-546.
- Caldwell, D. F., Chatman, J. A., & O'Reilly, C. A. (1990). Building organizational commitment: A multifirm study. Journal of Occupational Psychology, *63*, 245-261.
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. Journal of Personality and Social Psychology, *58*, 644-663.
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. Psychological Bulletin, *52*, 281-302.
- Cropanzano, R., Prehar, C. A., & Chen, P. Y. (in press). Using social exchange theory to distinguish procedural from interactional justice. Group and Organization Management.

Dozier, M., & Tyrrell, C. (1998). The role of attachment in therapeutic relationships. In J. A. Stevens, and W. S. Rholes (Eds.), Attachment theory and close relationships (pp. 221-248). New York: The Guilford Press.

Eisenberger, R., Huntington, R., Hutchinson, S., & Sowa, D. (1986). Perceived organizational support. Journal of Applied Psychology, 71, 500-507.

Etzioni, A. (1961). A comparative analysis of complex organizations. New York: Free Press.

Feldman, D. C. (1990). Managing part-time and temporary employment relationships: Individual needs and organizational demands. In M. London (Ed.), Employees, careers, and job creation. San Francisco: Jossey-Bass Publishers.

Feeney, J. A. (1998). Adult attachment and relationship-centered anxiety: Responses to physical and emotional distancing. In J. A. Stevens, and W. S. Rholes (Eds.), Attachment theory and close relationships (pp. 189-218). New York: The Guilford Press.

Feeney, J. A., & Noller, P. (1996). Adult Attachment. Thousand Oaks, CA: Sage.

Fisher, G. G., Stanton, J. M., Thoresen, P., Julian, A. L., Sinar, E. F., Aziz, S., Balzer, W. K., & Smith, P. C. (2000, April). The stress-in-general scale: Exploration and validation. Paper presented at the 15th annual conference of the Society of Industrial and Organizational Psychology, New Orleans, LA.

Fraley, R. C., & Waller, N. G. (1998). Adult attachment patterns: A test of the typological model. In J. A. Stevens, and W. S. Rholes (Eds.), Attachment theory and close relationships (pp. 77-114). New York: The Guilford Press.

Fraley, R. C., & Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. Journal of Personality and Social Psychology Bulletin, 78, 350-365.

Grossman, K. E., & Grossman, K. (1991). Attachment quality as an organizer of emotional and behavioral responses in a longitudinal perspective. In C. M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), Attachment across the life cycle. London: Tavistock/Routledge.

Hackett, R. D., Bycio, P., & Hausdorf, P. (1992, August). Further assessments of a three-component model of organizational commitment. Academy of Management Best Paper Proceedings, 212-216.

Harris, T., & Bifulco, A. (1991). Loss of parent in childhood, attachment style, and depression in adulthood. In C. M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), Attachment across the life cycle (pp. 234-367). London: Tavistock/Routledge.

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

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

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structural analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, *6*, 1-55.

Hulin, C. (1991). Adaptation, persistence, and commitment in organizations. In M. D. Dunnette and L. M. Hough (Eds.), Handbook of Industrial and Organizational Psychology: Volume 2 (pp. 445 - 471). Palo Alto, CA: Consulting Psychologists Press, Inc.

Jackson, S. E., & Schuler, R. S. (1985). A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. Organizational Behavior and Human Decision Processes, *36*, 16-78.

Johnston, M. A. (2000). Delegation and organizational structure in small businesses. Group and Organization Management, *25*, 4-21.

Joplin, J. R. W., Nelson, D. L., & Quick, J. C. (1999). Attachment behavior and health: relationships at work and home. Journal of organizational behavior, *20*, 783-796.

Kacmar, K. M., Carlson, D. S., & Brymer, R. A. (1999). Antecedents and consequences of organizational commitment: A comparison of two scales. Educational and Psychological Measurement, *59*, 976-994.

Kahn, R. P., & Byosiere, P. (1992). Stress in organizations. In M. D. Dunnette, & L. M. Hough (Eds.), Handbook of Industrial and Organizational Psychology, Volume 3 (pp. 571-650). Palo Alto, CA: Consulting Psychologists Press, Inc.

Kagan, J. (1958). The concept of identification. Psychological Review, *65*, 296-305.

Kanter, R. M. (1968). Commitment and social organization: A study of commitment mechanisms in utopian communities. American Sociological Review, *33*, 449-517.

Kline, R. B. (1998). Principle and practice of structural equation modeling. New York: The Guildford Press.

Kobak, R., & Hazan, C. (1991). Attachment in marriage: Effects of security and accuracy of working models. Journal of Personality and Social Psychology, 60, 861-869.

Konovsky, M. A., & Cropanzano, R. (1991). Perceived fairness of employee drug testing as a predictor of employee attitudes and job performance. Journal of Applied Psychology, 76, 698-707.

Levitt, M. J. (1991). Attachment and close relationships: A life-span perspective. In J. L. Gewirtz, & W. M. Kurtines (Eds.), Intersections with attachment (pp. 183-205). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. Psychological Bulletin, 108, 171-194.

McGee, G. W., & Ford, R. C. (1987). Two (or more?) dimensions of organizational commitment: Reexamination of affective and continuance commitment scales. Journal of Applied Psychology, 72, 638-641.

Meyer, J. P., & Allen, N. J. (1984). Testing the "side-bet theory" of organizational commitment: Some methodological considerations. Journal of Applied Psychology, 69, 372-378.

Meyer, J. P., & Allen, N. J. (1997). Commitment in the workplace: Theory, research, and application. Thousand Oaks, CA: Sage Publications, Inc.

Meyer, J. P., Allen, N. J., & Gellatly, I. R. (1990). Affective and continuance commitment to the organization: Evaluation of measures and analysis of concurrent and time-lagged relations. Journal of Applied Psychology, 75, 710-720.

Meyer, J. P., Paunonen, S. V., Gellatly, I. R., Goffin, R. D., & Jackson, D. N. (1989). Organizational commitment and job performance: It's the nature of the commitment that counts. Journal of Applied Psychology, 74, 152-156.

Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. Journal of Applied Psychology, 78, 538-551.

Mikulincer, M., & Arad, D. (1999). Attachment working models and cognitive openness in close relationships: A test of chronic and temporary accessibility effects. Journal of Personality and Social Psychology, 77, 710-725.

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

Morrow, P. C. (1983). Concept redundancy in organizational research: The case of work commitment. Academy of Management Review, 8, 486-500.

Mowday, R. T. (1998). Reflections on the study of and relevance of organizational commitment. Human Resource Management Review, 8, 387-401.

Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). Employee-organization linkages: The Psychology of commitment, absenteeism, and turnover. New York: Academic Press.

Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. Journal of Vocational Behavior, 14, 224-247.

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). New York: McGraw-Hill.

O'Reilly, C., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. Journal of Applied Psychology, 71, 492-299.

Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. Personnel Psychology, 48, 775-802.

Parker, G. (1994). Parental bonding and depressive disorders. In M. B. Sperling, & W. H. Berman (Eds.), Attachment in adults: Clinical and developmental perspectives (pp. 299-312). New York: The Guildford Press.

Quick, J. C., Joplin, J. R., Nelson, D. L., & Quick, J. D. (1992). Behavioral responses to anxiety: self-reliance, counterdependence, and overdependence. Anxiety, Stress, and Coping, 5, 41-54.

Reichers, A. E. (1985). A review and reconceptualization of organizational commitment. Academy of Management Review, 10, 465-476.

Routh, D. K., & Bernholtz, J. E. (1991). Attachment, separation, and phobias. In J. L. Gewirtz, & W. M. Kurtines (Eds.), Intersections with attachment (pp. 295-309). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Shaver, P. R., & Brennan, K. A. (1992). Attachment styles and the "big five" personality traits: Their connections with each other and with romantic relationship outcomes. Personality and Social Psychology Bulletin, 18, 536-545.

Shaver, P. R., & Hazan, C. (1993). Adult romantic attachment: Theory and evidence. In D. Perlman, & W. H. Jones (Eds.), Advances in personal relationships: Volume 4 (pp. 29-70). London: Jessica Kingsley Publishers, Ltd.

Simpson, J. A. (1990). Influence of attachment styles on romantic relationships. Journal of Personality and Social Psychology, 59, 971-980.

Smith, E. R., Murphy, H., & Coats, S. (1999). Attachment to groups: theory and measurement. Journal of Personality and Social Psychology, 77, 94-110.

Sperling, M. B., & Lyons, L. S. (1994). Representations of attachment and psychotherapeutic change. In M. B. Sperling, & W. H. Berman (Eds.), Attachment in adults: Clinical and developmental perspectives (pp. 331-347). New York: The Guildford Press.

Stanley, D. J., Meyer, J. P., Herscovitch, L., & Topolnytsky, L., (2000, April). Antecedents and correlates of three components of commitment: A meta-analysis. Paper presented at the 15th annual conference of the Society of Industrial and Organizational Psychology, New Orleans, LA.

Stanley, D. J., Meyer, J. P., Topolnytsky, L., & Herscovitch, L. (1999, April-May). Affective, continuance, and normative commitment: Meta-analyses of interrelations and outcomes. Paper presented at the 14th annual conference of the Society of Industrial and Organizational Psychology, Atlanta, GA.

Stanton, J. M., Balzer, W. K., Smith, P. C., Parra, L. F., & Ironson, G. (2000). A general measure of work stress: The stress in general (SIG) scale. Manuscript submitted for publication.

Sutton, C. D., & Harrison, A. W. (1993). Validity assessment of compliance, identification, and internalization as dimensions of organizational commitment. Educational and Psychological Measurement, 53, 217-223.

Thompson, B. (2000). Ten commandments of structural equation modeling. In L. G. Grimm and P. R. Yarnold (Eds.), Reading and understanding more multivariate statistics (pp. 261-283). Washington, DC: American Psychological Association.

Thorsteinson, T. J. (2000, April). Job attitudes of full- and part- time employees: A meta-analytic review. Paper presented at the 16th annual conference of the Society of Industrial and Organizational Psychology, San Diego, CA.

West, M., & Keller, A. (1994). Psychotherapy strategies for insecure attachment in personality disorders. In M. B. Sperling, & W. H. Berman (Eds.), Attachment in adults: Clinical and developmental perspectives (pp. 313-330). New York: The Guildford Press.

Wiener, Y. (1982). Commitment in organizations: A normative view. Academy of Management Review, 7, 418-428.

Williams, L. J., & Andersen, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship behavior and in-role behaviors. Journal of Management, 17, 601-617.

APPENDIX

Undergraduate Student Survey (Reformatted)

Part 1: Attitudes and Feelings toward Your Organization

The following questions ask about your thoughts and feelings toward the company you work for (whether you feel you can trust it, whether you feel they support you, etc.). Please use the following scale to rate your agreement with each statement. Place a number in the box next to the statement.

1	2	3	4	5	6	7
strongly disagree			neutral/ mixed			strongly agree

Rating

	I would be very happy to spend the rest of my career in this organization.
	Right now, staying with my organization is a matter of necessity as much as desire.
	I often wish that my organization felt as strongly for me as I do for it.
	I don't mind asking my company for advice or help.
	I owe a great deal to my organization.
	I need to be reassured that my company values me as an employee.
	Help is available from my organization when I have a problem.
	I do not feel any obligation to remain with my current employer.
	My organization cares about my opinions.
	Sometimes I feel that I force my company to show more commitment to me.
	I usually discuss my problems and concerns with my organization.
	My organization deserves my loyalty.
	I try to avoid getting too close to my organization.
	One of the few negative consequences of leaving this organization would be the scarcity of available alternatives.
	I really feel as if this organization's problems are my own.
	I feel comfortable depending on my organization.
	If I can't get my company to show interest in me, I get upset or angry.
	I would feel guilty if I left my organization now.
	I prefer not to show my company how I am feeling deep down.
	My organization strongly considers my goals and values.
	I often worry that my company won't want me as an employee anymore.
	My organization shows very little concern for me.
	I do not feel "emotionally attached" to my organization.
	It helps to turn to my company in times of need.
	My organization takes pride in my accomplishments at work.

Part 2: Work Stress

Using the following scale, please rate the extent to which your job is _____:

1 2 3 4 5 6 7
 not at all sometimes constantly
 present present present

<input type="checkbox"/>	Demanding
<input type="checkbox"/>	Irritating
<input type="checkbox"/>	Hectic
<input type="checkbox"/>	Under control
<input type="checkbox"/>	Calm
<input type="checkbox"/>	Nerve-wracking
<input type="checkbox"/>	Relaxed
<input type="checkbox"/>	Hassled

<input type="checkbox"/>	Many things stressful
<input type="checkbox"/>	Comfortable
<input type="checkbox"/>	Pushed
<input type="checkbox"/>	More stressful than you'd like
<input type="checkbox"/>	Smooth-running
<input type="checkbox"/>	Overwhelming
<input type="checkbox"/>	Pressured

Part 3: Intentions to Remain with Your Company & Performance Ratings

	Almost Never	Sometimes				Almost Always	
	1	2	3	4	5	6	7
How often do you think about quitting your job at your organization?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often do you go beyond what is required of you at your job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Not like at all	Neutral/ Mixed			Very much like to		
	1	2	3	4	5	6	7
If it were possible, how much would you like to work for a new organization?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Extremely Poor	Average			Extremely Good		
	1	2	3	4	5	6	7
How would you rate your daily overall performance on the job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What was your overall evaluation on your last performance review?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part 4: Final thoughts about Your Organization...

Below are a few more questions about your reactions to your company as an employer. Using the following scale, please place a number in the box next to each statement.

1	2	3	4	5	6	7
strongly disagree			neutral/ mixed			strongly agree

Rating

	Even if it were to my advantage, I do not feel it would be right to leave my organization now.
	This organization has a great deal of personal meaning for me.
	When my company disapproves of me, I feel badly about myself.
	I do not feel like "part of the family" at my organization.
	My organization cares about my general satisfaction at work.
	I don't want to become too attached to my organization.
	I worry a lot about my relationship with my organization.
	If I had not already put so much of myself into this organization, I might consider working elsewhere.
	My organization is willing to extend itself in order to help me perform my job to the best of my ability.
	When I'm not involved with my company, I feel somewhat anxious and insecure.
	I do not feel a strong sense of belonging to my organization.
	I would not leave my organization right now because I have a sense of obligation to the people in it.
	I often feel that my organization doesn't care about me as much as I care about it.
	I get uncomfortable when organizations want to be very close to their employees.
	I know my company will be there for me when I need it.
	Too much of my life would be disrupted if I decided I wanted to leave my organization now.
	Even if I did the best job possible, my organization would fail to notice.
	I find that my organization doesn't want to get as close as I would like.
	I don't feel comfortable opening up to my company.
	I feel I have too few options to consider leaving my organization.
	I worry a fair amount about losing my job with this organization.
	It would be very hard for me to leave my organization right now, even if I wanted to.
	I am very comfortable being close to my company.
	My organization really cares about my well-being.

Part V: Personal Information

Now we would like to learn more about you and your work history. Please respond to the following:

1) In what industry does your company work (e.g., telecommunications, consulting, government, etc.)?

--

2) Please classify your job into one of the following areas:

	Sales/Marketing
	Engineering
	Production/Quality Control
	Research & Development
	Human Resources/Personnel
	Computer/Systems
	Administrative Support
	Other (please specify):

3) What is your highest level of education?

	High School
	Some college
	College graduate
	Some post-graduate work
	Master's degree
	MD, JD, PhD or other professional degree
	Other (please specify):

4) Do you currently manage or supervise any employees?

Yes No

5) What is your employment status?

Full-time Part-time

6) How long have you worked for your company?

(in years)

7) What is your approximate annual salary?

(to nearest thousand)

8) Gender:

Male Female

9) Age (in years)

10) Marital Status:

Single Married

11) Ethnicity:

	African American
	Hispanic/Latino
	Native American
	Asian/Pacific Islander

	Multi-Racial
	Caucasian
	Other (please specify):

Would you like to receive a profile of your scores and a summary of this study's results?

Yes

No

If yes, please indicate the e-mail or mailing address where you would like this information sent:

Thank you once again for your time and participation!

Table 1
Characteristics of infant and adult attachments

Style	Infant Characteristics	Adult Characteristics
<p>Secure</p>	<ul style="list-style-type: none"> • Explores freely in caregiver’s presence • Distressed by separation from caregiver • Seek comfort upon reunion; easily comforted 	<ul style="list-style-type: none"> • Comfortable with trust and intimacy • See self as worthy of support and affection • Others seen as reliable and well-intentioned
<p>Anxious/ ambivalent</p>	<ul style="list-style-type: none"> • Excessive preoccupation with caregiver availability- reduces or precludes normal exploration • High levels of distress during separation • Difficult to reassure/comfort upon reunion 	<ul style="list-style-type: none"> • Strong, unsatisfied desires for emotional closeness • Fear of abandonment • See self as misunderstood, underappreciated, and having little control over outcomes • Others seen as undependable and unwilling/unable to commit
<p>Avoidant</p>	<ul style="list-style-type: none"> • Explores to avoid contact with caregivers • Little overt stress upon separation • Do not seek contact upon return- shift attention elsewhere 	<ul style="list-style-type: none"> • Reluctant to trust or be intimate • Uncomfortable with dependency • See self as autonomous with little need for strong attachments • Others seen as unreliable and over-eager for commitment

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Table 2

Fit indices for nested attachment models

Model	χ^2	<i>df</i>	CFI	NFI	RMSEA	χ^2_{diff}
1. One-factor model	885.47***	209	.94	.93	.11	
2. Two-factor model	696.51***	208	.96	.94	.09	
Model 2 vs. Model 1						188.96***

Note. CFI = comparative fit index; NFI = normed fit index; RMSEA = root mean square error of approximation.

**p* < .001.

Table 3

Variable means and standard deviations

Variable	Mean	SD
1. Attachment Anxiety	3.37	1.05
2. Attachment Avoidance	2.88	.78
3. Affective Commitment	4.14	1.30
4. Continuance Commitment	3.15	1.05
5. Normative Commitment	4.13	1.32
6. POS	5.00	1.24
7. Threat	3.19	1.11
8. Pressure	3.89	1.33
9. Turnover Intentions	3.53	1.59
10. In-role Performance (self-report)	5.58	.84
11. OCB (self-report)	5.06	1.30
12. In-role Performance (supervisor report)	6.42	.58
13. OCB-organization (supervisor report)	6.10	.86
14. OCB-individuals (supervisor report)	5.75	.79

Note. All items were rated on a scale of 1 = 7, with 1 indicating a low level of the variable.

Table 4. Reliability estimates and intercorrelations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Attachment anxiety	.86													
2. Attachment avoidance	.25	.72												
3. Affective commitment	-.71	-.03	.80											
4. Continuance commitment	.13	.36	-.05	.63										
5. Normative commitment	-.57	.06	.72	.14	.81									
6. POS	-.73	-.25	.69	-.06	.59	.91								
7. Threat	.37	.31	-.25	.07	-.27	-.47	.86							
8. Pressure	.09	.19	.06	-.02	.00	-.18	.77	.90						
9. Turnover intentions	.52	.09	-.56	-.01	-.58	-.59	.50	.25	.78					
10. In-role perf. (self)	-.12	-.15	.03	-.11	-.06	.07	.00	.15	.02	n/a ^a				
11. OCB (self)	-.22	.03	.22	-.14	.15	.08	.20	.34	-.07	.48	n/a ^a			
12. In-role perf. (supervisor)	-.15	.00	.08	.12	.10	.19	-.16	-.19	-.23	-.03	.09	.83		
13. OCB-org. (supervisor)	.04	-.05	-.07	.02	.03	.09	-.24	-.26	-.20	-.11	-.15	.59	.71	
14. OCB-indiv. (supervisor)	-.28	-.03	.21	.04	.25	.15	-.20	-.10	-.20	-.03	.06	.45	.36	.81

Note. Reliability coefficients are reported on the diagonal. All items were rated on a scale of 1 to 7, with 1 indicating a low level of the variable. Due to missing data, $N = 275-281$ for the self-report variables (1-11). For the supervisor-report variables (12-14), $N = 79-119$ due to missing data. For relationships between variables 1-11, a correlation of .12 or higher is significant at the .05 level. For relationships involving variables 12-14, a correlation of .19 or above is significant at the .05 level.

^a This was a one - item measure.

Table 5
Attachment anxiety and avoidance as predictors of study criteria

	<u>Threat</u>			<u>Pressure</u>			<u>Perceived Organizational Support</u>		
	b	se b	<i>B</i>	b	se b	<i>B</i>	b	se b	<i>B</i>
Attachment Anxiety	.32	.06	.30**	.04	.08	.04	-.84	.05	-.71**
Attachment Avoidance	.32	.08	.23**	.30	.10	.18**	-.11	.07	-.07 [†]
Model <i>F</i>		30.11**			5.27*			159.56**	
Total R ²		.18			.04			.54	

Note. *N* = 275-280 for relationships involving the self-report variables. Due to missing data, *N* = 80-119 for the relationships involving the supervisor-report variables.

[†] *p* < .10; * *p* < .05; ** *p* < .01.

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Table 5 (continued)

Attachment anxiety and avoidance as predictors of study criteria

	<u>Turnover Intentions</u>			<u>In-role Performance (self-report)</u>			<u>OCB (self-report)</u>		
	b	se b	B	b	se b	B	b	se b	B
Attachment Anxiety	.81	.08	.53**	-.08	.05	-.11 [†]	-.31	.08	-.25**
Attachment Avoidance	-.11	.11	-.05	-.13	.07	-.12*	.16	.10	.09 [†]
Model F		50.86**			4.48***			8.73**	
Total R ²		.27			.03			.06	

Note. N = 275-280 for relationships involving the self-report variables. Due to missing data, N = 80-119 for the relationships involving the supervisor-report variables.

[†] p < .10; * p < .05; ** p < .01.

Table 5 (continued)

Attachment anxiety and avoidance as predictors of study criteria

	<u>In-role Performance</u> <u>(supervisor report)</u>			<u>OCB-organization</u> <u>(supervisor report)</u>			<u>OCB-individuals</u> <u>(supervisor report)</u>		
	b	se b	B	b	se b	B	b	se b	B
Attachment Anxiety	-.08	.05	-.16 [†]	.05	.08	.07	-.22	.08	-.30**
Attachment Avoidance	.02	.07	.03	-.08	.11	-.08	.06	.11	.06
Model F		1.35			.35			3.52*	
Total R ²		.02			.01			.08	

Note. N = 275-280 for relationships involving the self-report variables. Due to missing data, N = 80-119 for the relationships involving the supervisor-report variables.

[†] p < .10; * p < .05; ** p < .01.

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Table 6
Hierarchical regressions with commitment and attachment measures as predictors

Final Weights	<u>Threat</u>			<u>Pressure</u>			<u>Perceived Organizational Support</u>		
	b	se b	B	b	se b	B	b	se b	B
Affective Commitment	.08	.08	.10	.31	.10	.30**	.28	.06	.30**
Continuance Commitment	-.01	.06	-.01	-.07	.08	-.05	.04	.05	.03
Normative Commitment	-.15	.07	-.18*	-.06	.09	-.06	.15	.05	.16**
Attachment Anxiety	.28	.09	.27**	.28	.11	.22*	-.46	.07	-.39**
Attachment Avoidance	.35	.09	.25**	.28	.11	.17*	-.25	.07	-.16**
<u>First Regression</u>									
Step 1: Commitment ΔR^2		.08**			.02			.50**	
Step 2: Attachment ΔR^2		.12**			.06**			.12**	
<u>Second Regression</u>									
Step 1: Attachment ΔR^2		.18**			.04*			.54**	
Step 2: Commitment ΔR^2		.02			.04*			.08**	

Note. N = 271 - 275 for relationships involving the self-report variables. Due to missing data, N = 77 - 114 for relationships involving the supervisor-report variables.

† p < .10; * p < .05; ** p < .01.

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Table 6 (continued)
Hierarchical regressions with commitment and attachment measures as predictors

Final Weights	<u>Turnover Intentions</u>			<u>In-role Performance (self-report)</u>			<u>OCB (self-report)</u>		
	b	se b	B	b	se b	B	b	se b	B
Affective Commitment	-.22	.10	-.17*	.11	.07	-.17*	.14	.10	.14
Continuance Commitment	-.04	.08	-.03	.00	.06	.00	-.17	.08	-.14*
Normative Commitment	-.44	.09	-.36**	-.11	.06	-.17 [†]	.00	.09	.00
Attachment Anxiety	.27	.11	.18*	-.10	.08	-.13	-.18	.11	-.14
Attachment Avoidance	.14	.11	.07	-.18	.08	.17*	.20	.11	.12 [†]
<u>First Regression</u>									
Step 1: Commitment ΔR^2		.38**			.02*			.07**	
Step 2: Attachment ΔR^2		.02**			.02*			.02	
<u>Second Regression</u>									
Step 1: Attachment ΔR^2		.27**			.03*			.06**	
Step 2: Commitment ΔR^2		.13**			.01			.03 [†]	

Note. N = 271 - 275 for relationships involving the self-report variables. Due to missing data, N = 77 - 114 for relationships involving the supervisor-report variables.

[†] p < .10; * p < .05; ** p < .01.

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Table 6 (continued)

Hierarchical regressions with commitment and attachment measures as predictors

Final Weights	In-role Performance (supervisor report)			OCB-organization (supervisor report)			OCB-individuals (supervisor report)		
	b	se b	B	b	se b	B	b	se b	B
Affective Commitment	.04	.07	.07	-.10	.11	-.15	-.05	.12	-.08
Continuance Commitment	-.01	.05	-.01	.02	.10	.03	.03	.09	.04
Normative Commitment	-.12	.06	-.18*	.13	.10	.20	.10	.10	.18
Attachment Anxiety	-.14	.08	-.17 [†]	.07	.12	.09	-.17	.13	-.23
Attachment Avoidance	-.08	.08	-.08	-.17	.13	-.16	-.02	.14	-.03
<u>First Regression</u>									
Step 1: Commitment ΔR^2		.02			.01			.07	
Step 2: Attachment ΔR^2		.02			.02			.03	
<u>Second Regression</u>									
Step 1: Attachment ΔR^2		.02			.01			.08*	
Step 2: Commitment ΔR^2		.02			.02			.02	

Note. N = 271 - 275 for relationships involving the self-report variables. Due to missing data, N = 77 - 114 for relationships involving the supervisor-report variables.

[†] p < .10; * p < .05; ** p < .01.

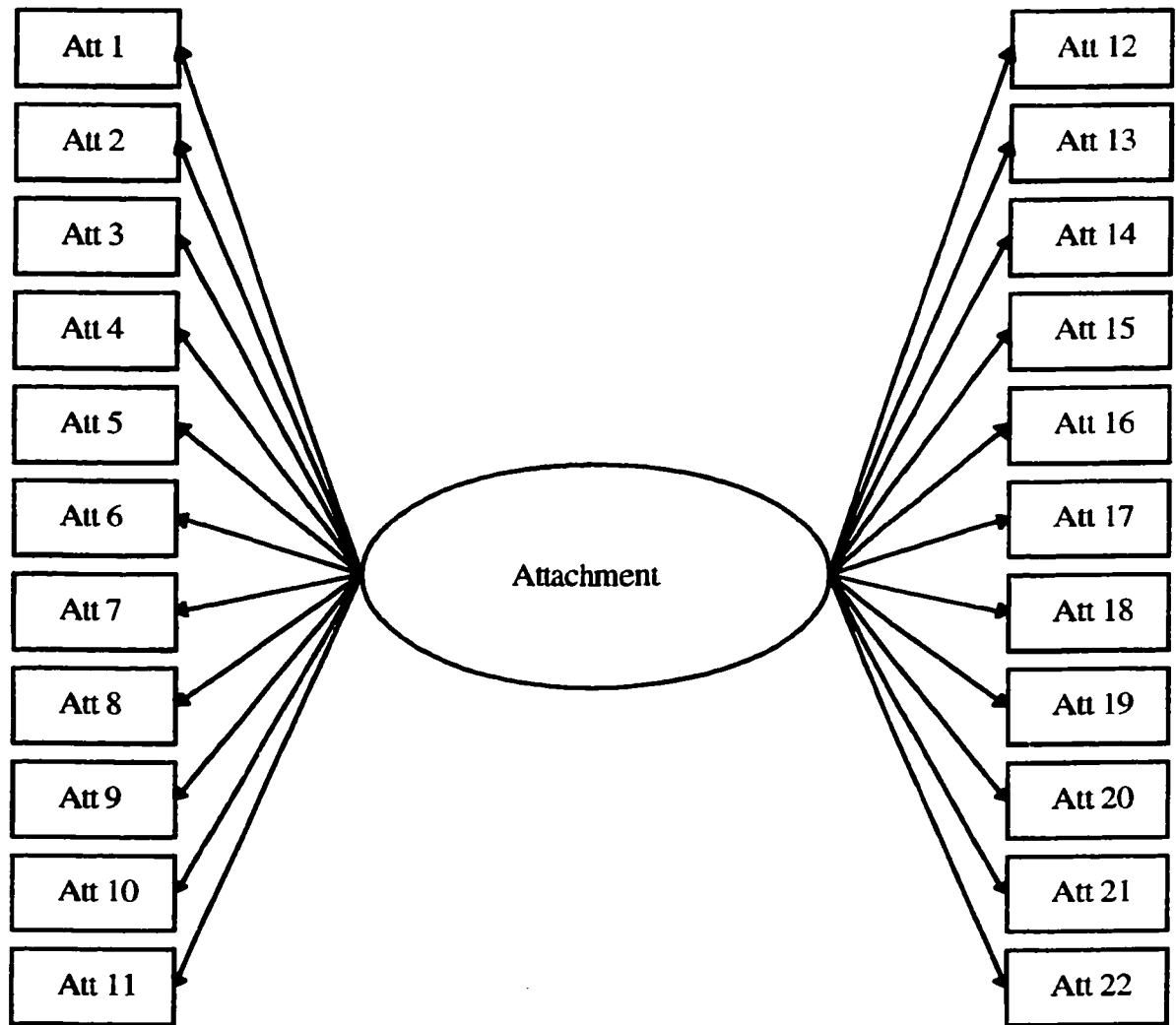


Figure 1. One-factor attachment model (Att = attachment).

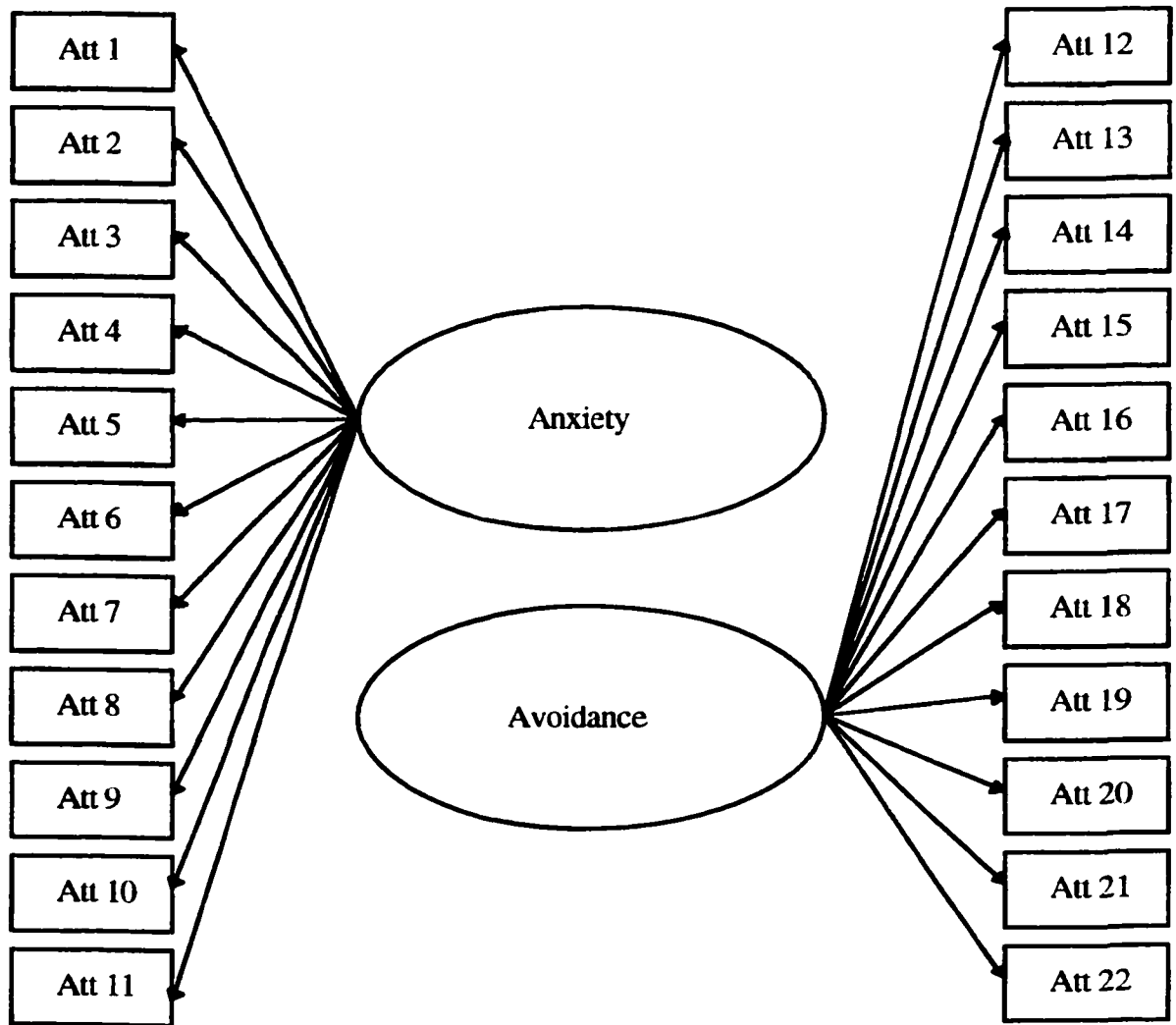


Figure 2. Two-factor attachment model (Att = attachment).