CHAPTER I- OVERVIEW OF THE RESEARCH

Introduction

Research shows that over 50% of North American business acquisitions fail as measured by increase in shareholder value (Anonymous, 2000; Cartwright & Cooper, 1996; DeVoge & Spreier, 1999; Hamel, 2000; Pritchett, Robinson, & Clarkson, 1997). Recent literature suggests that the major reason for this high rate of failure is due to employees not reaching a level of productivity that is equal to or greater than that of the two entities prior to their combination (Axel, 1997; Cartwright & Cooper, 1996; Covin, Sightler, Kolenko, & Tudor, 1996).

Specifically, it is theorized that employees from the acquired entity have low commitment to the new post-acquisition organization during the initial time period (three to six months) following the completion of the acquisition, leading to reduced productivity, which in turn leads to poor financial performance (Bourantis & Nicandrou, 1997; Broussseau, 1989; Bruhn, 2001; Carey, 2000; Carlton, 1997; Chatterjee, Lubatkin, Schweiger, & Weber, 1992; Covin et al., 1996; Datta, 1991; DelVecchio, 1999; Fried, Tiegs, Naughton, & Ashforth, 1996; Greenwood, 1996; Mirvis, 1985; Mottola, Bachman, Gaertner, & Dovidio, 1997; Newman & Krzystofik, 1993; Paterson, 2000; Weber, 1996).

Background

Mergers and acquisitions (M&A) have become an attractive means by which to grow an enterprise. The values of mergers and acquisitions announced globally in 1998 amounted to over $2.5 trillion (Viscio, Harbison, Asin, & Vitaro, 1999). In the United States alone, announced merger and acquisition activity totaled over $1.7 trillion, roughly 14% of the value of all publicly listed companies in America (Hamel, 2000). In 1999, three trillion dollars worth of mergers were announced (Hamel, 2000). In the past three years, 18 of the 20 largest acquisitions in history have occurred (Hamel, 2000). Experts predict that the increased globalization of the business environment will support an even greater rate of M&A activity in the years to come (Covin et al., 1996; Hamel, 2000; Weber, 1996).

Unfortunately, many M&As have not lived up to their potential in terms of increasing shareholder value. Several researchers have found that less than half of all M&As meet their initial financial expectations, and that the failure rates of North American acquisitions, as measured by an increase in shareholder value, are in the 50-60% range (Anonymous, 1996, 2000; Covin et al., 1996; DelVecchio, 1999; Deogun & Lipin, 1999; Eberhart, 2001; Hamel, 2000; Weber, 1996). Barely one-half of the M&A deals in recent years delivered shareholder value that outperformed even the relevant industry average, as measured by financial rate of return (Edwards & Usher, 2001; Hodge, 1998). Additional studies have shown that mergers and acquisitions have had an unfavorable impact on the profitability of the combined organization (Cartwright & Cooper, 1996; DelVecchio, 1999; Deogun & Lipin, 1999; Eberhart, 2001; Troiano, 1999; Viscio et al., 1999).

This lack of post-acquisition success has in the past been attributed to financial, market or other economically driven issues (Buono, Bowditch, & Lewis, 1985; Cartwright & Cooper, 1996; Hamel, 2000; Pritchett, 1996). Recent studies, however, point to the belief that human versus financial factors, are among the root causes of merger and acquisition failure.
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(Anonymous, 2000; Buono et al., 1985; Cartwright & Cooper, 1996; Covin et al., 1996; Fried et al., 1996; Gadiesh, Ormiston, Rovit, & Critchlow, 2001; Gandossy & Jeffay, 1995; Hamel, 2000; Mirvis, 1985). Several researchers have specifically theorized that employees from the acquired entity have a low level of commitment to the new post-acquisition organization during the initial period of time after the completion of the acquisition (Cartwright & Cooper, 1996; Ozag, 2001; Viscio et al., 1999).

From an organizational culture perspective, it has been suggested that employees’ lack of commitment to the new post-acquisition culture is a key factor in the success or failure of the acquisition. (Bourantis & Nicandrou, 1997; Buono et al., 1985; Buono & Nurick, 1992; Cartwright & Cooper, 1993; DelVecchio, 1999; DeVoge & Spreier, 1999; Gandossy & Jeffay, 1995; Hickins, 1999; Hilborn, Feldman, Robinson, & Stybel, 1999; Kramer, 1999; Krell, 2001; Mirvis, 1985; Villinger, 1996; Viscio et al., 1999; Weber, 1996). Gaining and accelerating post-acquisition employee commitment therefore is maybe paramount to the success of the newly combined business enterprise.

Statement of the Problem

I believe for employees to successfully commit to a new organization after an acquisition, they need to exhibit proactive and adaptive behaviors. Employees who are flexible enough to find a way to adapt to new situations, and who actively seek solutions to problems, will find a way to justify remaining with the new, post-acquisition organization.

Employee commitment to the employing organization has been a widely studied concept. In recent years, the concept of employee commitment has been studied in relationship to both outcomes of commitment, such as retention, job performance, turnover and other job-related constructs, as well as possible antecedents to commitment (DeLoria, 2001; Meyer & Allen, 1997; Meyer, Stanley, Herscovitch, & Topolnytsky, 2001; Price & Mueller, 1986). Researchers have stated that there have been few studies, however, which have examined employee commitment in the workplace after an acquisition by another business enterprise (DeLoria, 2001; Kacmar, Carlson, & Brymer, 1999; Meyer & Allen, 1997; Meyer et al., 2001; Newman & Krzystofsiak, 1993).

Due diligence is the process of assigning a financial value to the capital and goodwill of an enterprise prior to its purchase. Historically, most merger and acquisition due diligence processes focused on the financial aspects of the integration, with very little thought being given to the impact on the human resources of either the acquiring or the acquired firm (Buono et al., 1985; Cartwright & Cooper, 1996; Fried et al., 1996; Pritchett et al., 1997). In spite of the need to create tools to assess post-acquisition employee commitment, there are, according to several researchers, currently no valid due diligence processes which exist to assess the human capital of a potential acquisition (Buono et al., 1985; Cartwright & Cooper, 1996; Fried et al., 1996; Weber, 1996).

The acquisition process creates significant trauma and chaos for employees of both the acquiring and the acquired firm (Braksick, 2000; Buono et al., 1985; Buono & Nurick, 1992; Cartwright & Cooper, 1993; Cartwright & Cooper, 1996; Covin et al., 1996; Daniel & Metcalf, 2001; DelVecchio, 1999; Newman & Krzystofsiak, 1993; Ozag, 2001). In a quantitative study of
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30 employees, researchers found that, for the acquired employee, there is often a negative reaction to the acquisition. This is believed to result from a loss of connection to the former culture of the pre-acquisition firm (Newman & Krzystofiak, 1993; O'Brien, 1992). In addition to the loss of connection, there is also a perceived loss of power. In a 1990 study of post-acquisition attitudes regarding the success of a merger, 2,845 employees were surveyed regarding their level of satisfaction with the merger two years after the change of control date. Legacy employees of the acquired firm felt a greater perceived loss of power than employees from the acquiring organization (Covin et al., 1996). This low sense of power was believed to have contributed to low post-acquisition financial performance. According to Covin (1996), during their work life, "... employees attach themselves to jobs, co-workers, work routines, the application of personal skills, and performance and career goals" (p. 132). When these attachments are altered by the impact of the merger, employees have a reduced feeling of emotional commitment to the post-acquisition organization. In a recent mixed methods study of 150 merger survivors, David Ozag concludes: "Trust and empowerment often are eroded during merger efforts." (Ozag, 2002, p. 236) These studies say that negative feelings about the acquisition may occur in some employees, and this may have a wide range of sources, magnitude of negativism and multiple forms of expression.

One researcher has compared the merger and acquisition process to a cooperative relationship, such as marriage (J. D. Jick as cited in Cartwright & Cooper, 1996), while another researcher has stated that the M&A process should be viewed more from a power relationship, such as assault (Mangham, 1979, as cited in Cartwright & Cooper, 1996). Several sources believe that the emotions felt by an employee during the aftermath of an acquisition should be viewed from the lens of the Kubler-Ross model of personal bereavement (Cartwright & Cooper, 1996; Marks & Mirvis, 1998; Mirvis, 1985) or as the distress a child feels when separated from its mother (A. Schwieger, Ivanecevich, & Power, 1987). These models all treat the M&A process as a type of forced change. Forced change, as compared to organic or unforced change, requires the individual to cope with a greater amount of anxiety and ambiguity (Buono & Nurick, 1992; Cartwright & Cooper, 1993). In addition, the Lewinian notion of "refreezing" may not be possible during the initial post-M&A period. Often, the chaos and "permanent white water" of organizational change ensuing after an M&A (Vaill, as cited in Buono & Nurick, 1992), prevents the employee from quickly re-connecting to a post-M&A culture, as the new culture does not fully form until many months after a merger or acquisition (Risberg, 2001; Schein, 2000; Schneider & Dunbar, 1992; D. Schwieger & Denisi, 1991).

None of the recent studies has focused on antecedents to employee-organization commitment during the 60 day time period immediately after an acquisition. Newman and Krzystofiak’s study of changing employee attitudes after an acquisition sampled employees three months before an acquisition, and six months after the change of control date (Newman & Krzystofiak, 1993). Theresa Covin and her colleagues waited until two years after an acquisition to attempt their study of post-acquisition attitudes regarding merger success (Covin et al., 1996). Deepak Datta also waited over two years before collecting data on the influence of organizational culture “fit” on post-acquisition performance (Datta, 1991). David Ozag’s mixed method study of the influence of hope and survivorship on post-acquisition commitment used a single survey several months after the change of control date to measure post-acquisition commitment (Ozag, 2001). Gerard Del Vecchio’s study of determinants of job satisfaction of an
acquisition was derived from three different samples to a single survey three months after an acquisition (DelVecchio, 1999). The literature surrounding employee commitment after organizational change has focused on either the attributes of the change process, or the impact of the change process on organizational culture. At this time it appears there has been no work completed which addresses the issue of what attributes support an employee’s initial journey to commitment after an acquisition.

**Theoretical Underpinnings**

The fields of adult learning, human resource development and family/marriage therapy were explored to gain an understanding of what individual personality attributes or traits are theoretically necessary to support employee commitment. These fields were chosen for exploration because of related research in each field with regards to transformational learning, dealing with change, and commitment.

**Transformational Learning**

The belief that an employee committing to a new culture after a M&A reflects a process that is similar to a transformational learning journey that has been endorsed by many researchers who have studied employees’ reactions to M&As (Buono et al., 1985; Cartwright & Cooper, 1996; DeVoge & Spreier, 1999; Fried et al., 1996; Greenwood, 1996; Habeck, Kroeger, & Taem, 2000; Hilborn et al., 1999; Jones & Pollard, 2000; Kramer, 1999; Krell, 2001; Marks & Mirvis, 1998; Marquardt, 1998; McConnell, 2000; Nahavandi & Malekzadeh, 1988; Newman & Krystoflak, 1993; Schein, 2000; Singh, 1999; Troiano, 1999; Tynes, 1997). One researcher believes that this transformational learning process is an actual condition for transformational change in organizations. In a recent study of transformational change theories, one characteristic cited by all theorists studied was the notion of commitment (Henderson, 2002). According to Henderson (2002): “The transformational change theorists point to involvement in the change process as producing commitment, whereas the transformational learning theorists see commitment as a matter of aligning the individual’s values and beliefs with those of the organization” (page 207).

Henderson also provides a summary of the transformational learning process as derived from the works of Jack Mezirow and Paulo Freire. In this summary, he states there are four key phases of transformational learning:

1. Some disruptive event occurs in the learner’s life that challenges his or her view of the world.
2. The learner then critically reflects on beliefs, assumptions, and values that shape the current perspective.
3. The learner develops a new perspective to deal with the discrepancies surfaced by the triggering event.
4. The learner integrates the new perspective into his or her life. (Henderson, 2002, page 203).

The third and fourth stage of Henderson’s transformational process description are outcomes of experiential learning as originally espoused by John Dewey, and further elaborated on by Kurt Lewin. Lewin states that real learning is maximized when there is a dialectic tension
between the immediate, concrete experience and analytic detachment. Lewin considered this critical to organizational change and improvement (Lewin, 1951; Shields, Aaron, & Wall, 2002).

One proposed antecedent to transformational learning has evolved through the study of successful action learning programs. Action learning has been defined as a process to facilitate transformational learning. According to Marsick (1990): “Action learning programs provide a framework for learning from experience that necessarily involves reflection, that typically involves critical reflection” (p. 156). Action learning is a tool to facilitate critical self-reflection. For action learning to be effective, individuals need to agree to participate in the learning process, and take an action-oriented approach, or what Marsick describes as a “proactive stance to learning” (Marsick, 1990). Being proactive has been mentioned as a necessary construct for the successful completion of transformational learning, but there is scant research available which provides for a clearer definition of positive affect in the context of transformational learning, other than to recognize the importance of an action-orientation to learning (Henderson, 2002; Marsick, 1990; Mezirow, 1990, 1991). For the successful completion of a transformational learning journey, individuals need to approach the action learning process with a “recognized need to learn” (Yorks & Marsick, 2000, p. 262). Having a proactive orientation to action learning can be implied to be a key antecedent to successful transformational learning (Yorks & Marsick, 2000).

**McClusky’s Theory of Power-Load- Margin**

Another theoretical lens through which the employee’s commitment process can be viewed is that of Howard McClusky’s Theory of Power-Load- Margin. According to McClusky (McClusky, 1990), the key factors of adult life are the Load the adult carries in living, and the Power that is available to the individual to carry the Load. Margin was a formula expressed as a ratio between the Load (of living) and the Power to carry the load. McClusky (1990) states that: “Margin is a function of the relationship of Load to Power. In simplest terms, Margin is surplus Power. It is the Power available to a person over and beyond that which is required to handle his Load” (p. 149). Therefore, the greater the Power factor, the greater the adult’s capacity for sustaining his or her personal Load.

Power refers to the resources one possesses in any given moment to meet and manage the Load. According to McClusky (Heimstra, 2002), Power:

…consists of a combination of such external resources and capacity as family support, social abilities, and economic abilities. It also includes various internally acquired or accumulated skills and experiences contributing to effective performance, such as resiliency, coping skills and personality (p.3).

Two key attributes of Power, which have been studied in the context of an individual’s adaptation to change, are pro-activeness and adaptive coping (Londoner, 1993). Another researcher has linked McClusky’s Power concept to assessing readiness for change (Hanpachern, Morgan, & Griego, 1998). It is McClusky’s assumption that a person needs to have banked a certain level of Power in order to begin and complete a learning journey (Knowles, 1990).

Neither transformational learning nor Theory of Margin research has adequately explored possible antecedents to either model. Both the transformational learning model and the action learning process begin with the assumption that an individual already has a level of adaptability
and positive affect to successfully complete the journey or process. With regards to the theory of margin, there has been little research into further exploring the antecedents to Power, and their impact on coping with life’s challenges (Heimstra, 1993).

The successful completion of this transformational learning journey is measured by the employee’s ability to reconnect with the new post-M&A organization. The success of this re-connection process is may be measured by the level of employee commitment to the new culture (DelVecchio, 1999; Paterson, 2000; Pritchett et al., 1997).

**Antecedents to Commitment**

The difficulty for human resources practitioners is determining during the period of post-acquisition commitment, which employees have the capability to complete the transformational learning journey from the old to the new culture. As stated previously, there are no valid tools that are available to predict an employee’s success in completing the journey and re-connecting, or committing to the new culture. While there has been some theory developed to describe post-M&A integration employee behaviors (Bourantis & Nicandrou, 1997), there has been virtually no research completed which looks at what type of employee is successful at completing this process (DelVecchio, 1999; Ozag, 2001; Schaeffer, 1999).

Research in the area of employee commitment has focused on the impact of employee-organization commitment on turnover, absenteeism, job satisfaction and other work- productivity related variables (N. J. Allen & Meyer, 1996; Meyer & Allen, 1997; Meyer et al., 2001; R. Mowday, Porter, & Steers, 1982; R. T. Mowday & Steers, 1979; Price & Mueller, 1986; Sayeed, 2000; Singh, 1999; Vandenberg & Lance, 1992; Wright, 1997; Wright & Larwood, 2001). This research has focused on employee commitment as having an antecedent, or causal relationship to these variables. Recent literature suggests that there are also several antecedents to employee commitment (Bateman & Crant, 1993; Meyer et al., 2001). One of these antecedents has been broadly defined as “personality characteristics” (Bateman & Crant, 1993; A. Cohen, 1992; Currivan, 1999; Meyer et al., 2001).

Current literature in the areas of transformational learning and Theory of Margin give hints as to the possibility of behavior-based attributes which include adaptiveness and an action-orientation to problem solving (Hanpachern et al., 1998; Heimstra, 1993; McClusky, 1990; Mezirow, 2000; Popper & Lipshitz, 2000), but there has been no specific research into behavioral antecedents to transformational learning, or to specific personality attributes or traits which contribute to an increase in Power to manage Load.

There is related research in the fields of psychology and human resource development that has explored behavioral attributes relating to completing the transformational learning process. In the area of psychology, there has been recent research on several constructs which relate to an individual coping with change in the context of life events such as dealing with cancer, loss of family members and related personal stress situations (Kohn & O’Brien, 1997). In addition, in the field of human resources development, work has been done on examining behaviors that allow employees to sustain a high level of productivity in very stressful work environments (Crant, 1995, 2000). Individuals who demonstrate both of these traits have the ability to deal with a high and sustained degree of ambiguity through adaptiveness in coping with
the stress of change, and the ability to be proactive in managing the transformational learning journey.

The following is a summary of these two traits that provides a general overview of each trait, along with a brief discussion of the relevance of the trait to the study of post-acquisition employee commitment.

**Adaptiveness in Coping with Stress**

According to Paul Kohn (Kohn, Wood, & Pickering, 2002): “Adaptiveness constitutes coping consistently so as to reduce distress, or at worst, not aggravate it” (p. 4). When coping with a stressful situation, an individual is presented with a choice of various responses. The more adaptive the response, the greater the degree of control the individual feels in responding to stress (Kohn, Wood, Pickering, & DeCicco, 2002). There are various types of adaptive responses to stress, which include problem-focused, emotionally palliative, emotionally ventilative, and avoidance focused (Kohn & O'Brien, 1997). Predicting which individuals are able to demonstrate the ability to employ the proper type of adaptive response to stressful situations is important, as this trait could also be a predictor of post-M&A employee commitment. As adaptiveness is a reactive behavior (Kohn, Wood, & Pickering, 2002), it is important to understand also what predictive personality behavior exists which could predict an employee’s success at completing the learning journey.

**Positive Affect**

Successfully coping with organizational change requires an employee to have a positive disposition or *Positive Affect (PA)* towards the change process, and the impact of the change on the individual’s meaning scheme (Folkman & Moskowitz, 2000; Watson, Pennebaker, & Folger, 1986; Watson & Slack, 1993). An individual who has the attribute of PA demonstrates a proactive approach to dealing with change and the resulting stress of changing. Crant (2000) defines proactive behavior as: “taking initiative in improving current circumstances or creating new ones; it involves challenging the status quo rather than passively adapting to present conditions” (p. 436). A related definition defines proactive behavior as: “Behaviors that directly alter environments” (Bateman & Crant, 1993, p. 104). According to Bateman (1993): “The prototypic proactive personality, as we conceive it, is one who is relatively unconstrained by situational forces, and who effects environmental change” (p. 104).

Employees with proactive behaviors actively participate in change processes, hoping to alter work environments to their benefit (Bateman & Crant, 1993; Crant, 2000). This action orientation also reflects Kurt Lewin’s belief that people are more committed to solutions that they have helped design than to carrying out advice given by “experts” (Weisbord, 1991). Proactive individuals exhibit behaviors which reinforce an action-approach to learning, which is a critical component of both andragogy, (Holton, Knowles, & Swanson, 1998; Knowles, 1989) and transformational learning leading to transformational change in organizations (Henderson, 2002).

Employee commitment to a new organizational culture can be viewed as a transformational learning event. To complete the commitment process requires the employee to have certain Power enhancing personality attributes. Two attributes that have been identified in
the theoretical literatures of adult learning, HRD and family/marriage therapy as causal to successful commitment are: (a) adaptive coping, and (b) positive affect.

**Area of Concern**

Employee commitment is critical to the success of a merger or acquisition. The M&A process is a stressful event for employees, which according to Mezirow (2000), creates a “disorienting dilemma” (p. 56), which is the first step in the transformational learning process. I believe for employees to successfully navigate this learning journey, they need to exhibit certain behaviors, which are both adaptive and proactive.

At this time there has been no research accomplished to date, which has established adaptive coping and positive affect attributes as antecedents to post-merger employee commitment during the initial 60-day time period after an acquisition. There is also a need to determine if these antecedents have a causative link to employee-organization commitment in the context of a post-M&A organization. In the context of a post-M&A culture, recent research has focused on the attributes of trust and hope (Ozag, 2001), communications (D. Schwieger & Denis, 1991), and job satisfaction (DelVecchio, 1999) as possible antecedents or causal to employee commitment. To date, no study has been completed which examines employee commitment through the theoretical lens of transformational learning, and whether or not there are certain attributes antecedent to transformational change which also may be antecedent to organizational commitment.

**Purpose of Study**

The purpose of this study is to determine antecedents to employee re-commitment after an acquisition. To accomplish this purpose, an investigation of both the re-commitment process and the antecedents that support this process must be completed. Both the commitment process and the antecedents to commitment will be investigated through the use of a survey design that will measure employee commitment at three separate stages of the acquisition process. One instrument, comprised of a commitment scale, a positive affect scale and an adaptive coping scale, will be administered to the same sample three times during the post-acquisition process.

**Assumptions**

The following assumptions are used in this study:

1. Employee-organization commitment after an acquisition is a transformational learning process.
2. Successful completion of this learning journey is influenced by specific personality attributes

**Research Questions**

The acquisition of a business enterprise has an impact on the employees of the acquired firm. The acquisition process requires employees to adapt to the new organization’s culture, and, in time, commit to the values and beliefs of the new organization. The research questions that this study will attempt to explore center around the employee’s journey to commitment.
**Research Question #1.**

What pattern of scores on the commitment scales over three time periods are exhibited by a group of employees involved in a merger of two companies?

Past research has focused on the need for employees to commit in order for the acquisition to be considered successful (Cartwright & Cooper, 1996; Datta, 1991; DeVoge & Spreier, 1999; Douglas, 2000; Mottola et al., 1997). To date, there has been no research that has examined the patterns in commitment levels of acquired employees from the period immediately after the closing of an acquisition to a point 60 days after the closing date.

**Research Question #2.**

To what extent are these patterns influenced by the organizational tenure and occupational status of group members?

Recent studies have shown that the employees from different levels of an organization have (organizational status) different perspectives and reactions to the impact of an acquisition (Bijisma-Frankema, 2001; Bouwen & Overlaet, 2001; Bruhn, 2001; Daniel & Metcalf, 2001; Greenwood, 1996). Seniors leaders, because of their proximity and influence on acquisition decision making and communications processes, have been shown to have a strong resistance to committing to a new post-acquisition culture (Fried et al., 1996). On the other hand, employees with little vested interest, either due to low tenure or organizational rank, have an easier time with the transition process (Cartwright & Cooper, 1993). Organizational tenure has been linked to continuance commitment, but has not been determined to be an antecedent to affective or normative commitment (Meyer & Allen, 1997).

**Research Question #3.**

To what extent are these patterns influenced by the level of positive affect and adaptive coping attributes of group members?

Research in the fields of adult learning and human resource development has surfaced the notion that there are specific personality attributes which positively influence successful transformational learning and dealing with change (Henderson, 2002; Knowles, 1990; Mezirow, 2000). This research suggests that individuals who are adaptive and proactive are better able to successfully complete a learning journey than those who do not have these attributes.

Additionally, there is research in the field of family and marriage therapy that suggests that individuals with strong coping skills (Lamanna & Riedmann, 1988) and a proactive view (Ganong & Coleman, 1994) towards interpersonal relationships have a greater level of success in completing the commitment process during re-marriage. The cycle of marriage-divorce and re-marriage mirrors some of the processes experienced by employees completing the commitment to a new organizational culture (Cartwright & Cooper, 1996). Therefore, if a relationship exists between these two attributes and commitment in the context of commitment to a new family, then the possibility exists that this would also hold true in the context of commitment to a new organizational culture. In addition, several researchers also forward the belief that positive affect has an influence on adaptive coping (Folkman & Moskowski, 2000).
**Research Question # 4.**

To what extent are these patterns influenced by the perception of success of the acquisition by group members?

Research suggests that the commitment process is quicker for employees who perceive that the acquisition is a financial success (Gadiesh et al., 2001). Additionally, research also exists which forwards the position that if the employee believes the acquisition is failing, commitment may take longer, or not even happen (Gottlieb & Conkling, 1995; Habeck et al., 2000; Hilborn et al., 1999).

As this is an exploration of the influences of certain dispositional and demographic variables on the three components of the ANC committee model, a model is provided (Figure 1) which illustrates a summary of the research questions:

*Figure 1. Summary of the research questions*

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**Importance of the Study**

There are several important reasons why this study needs to be accomplished. First, there is a need to fill a gap in the literature concerning employee commitment to a new organization after an acquisition. Research has not examined the process surrounding the employee’s commitment to a new organization during the first 60 days after an acquisition.

Second, there is a desire to have a more complete understanding of individual personality attributes exhibited by employees who are completing the commitment process. It is becoming increasingly important to understand what these employees do or do not have in common that
gave them the Power to complete the commitment process after an acquisition. If HRD practitioners and adult educators have a more robust understanding of the commitment process, they will be able to develop more effective learning processes to facilitate both the velocity and depth of commitment to a post-acquisition culture. This in turn will result in the possibility of a greater number of acquisitions meeting financial and non-financial targets set by shareholders.
CHAPTER II- LITERATURE REVIEW

Background

Mergers and acquisitions are important methods by which business enterprises attempt to increase revenue, and ultimately shareholder value. Since the 1980s, the number of mergers and acquisitions in North America has increased three-fold over the prior two decades (Bower, 2001; Galpin & Herndon, 2000; Hamel, 2000). Unfortunately, as the rate of mergers and acquisitions increases, so does the rate of failure (Cartwright & Cooper, 1996; Hamel, 2000). And as the failure rate of these transactions increases, so does the belief that the cause of these failures is related to issues relating to employee commitment to the new organization (Marks & Mirvis, 1998; Marquardt, 1998; Mirvis, 1985; Nahavandi & Malekzadeh, 1988; O'Brien, 1992).

One recent study revealed the fact that in 100 recent failed or troubled mergers, 85 percent of executives who were surveyed said that the major problem was the difference in management style or practice (Carlton, 1997). Carlton (1997) also reports that recent qualitative surveys of senior leaders who have experienced a merger reflect a common belief that due diligence exercises strongly underestimate the cultural aspects of the merger or acquisition, leading to tremendous integration issues after the deal has been completed. Galpin & Herndon’s (2000) review of why M&As fail led them to the conclusion that leaders in organizations know that human resource-related issues are a growing root cause of failed mergers: “but they have not succeeded in doing much to manage the issues that are involved in successfully integrating an M&A deal” (p. 4). Other researchers have also stated that overcoming human resource-related issues as being the key to successful post-M&A integration (Bower, 2001; Braksick, 2000; Buono et al., 1985; Cartwright & Cooper, 1996; DelVecchio, 1999; Marshall, 2001; Ozag, 2001; Schaeffer, 1999).

As researchers narrow their focus on the issues surrounding human capital’s impact on M&A success, new information is being developed in the area of employee-organization commitment that is targeting the concept of commitment to the new organization. (Commitment has not yet been defined as a term for use in the context of employee commitment to a new culture after an acquisition). To better understand the concept of recommitment to a new organization, a review of several linked concepts must first be accomplished.

The purpose of this literature review is to investigate those dispositional personality attributes that have been shown to influence an individual’s ability to successfully cope with change. The literature review will establish the framework, or lens through which the concept of employee commitment may be viewed in the context of post-acquisition integration with a new culture. The first step in this review will be to explore and define the nature of mergers and acquisitions. The second section will explore the impact of acquisitions on employees, and what models are currently used to investigate post-merger employee behavior. The second section will review recent dialogues concerning employee-organization commitment, and examine those models of commitment that have evolved to be considered core to the study of employee-organization commitment. The fourth section of this literature review will look at antecedents to commitment from two theoretical perspectives. The first perspective will be that of adult learning, and how the concept of commitment influences transformational learning and one’s ability to deal with change. This review will assist in forwarding certain antecedents to
commitment that are applicable to the study of commitment after an acquisition. Through a review of the literature surrounding divorce and re-marriage in the field of family and marriage therapy, insights will be gained as to the influence of commitment on an individual’s ability to successfully manage the change from marriage, divorce and re-marriage. This second perspective on the influence of commitment on dealing with forced family change will provide additional antecedents to commitment, which may be useful in developing a construct for employee commitment after forced organizational change, such as a merger.

The final segment of the literature review will involve the creation of a proposed theoretical construct based on the insights gained from the aforementioned functional topic reviews. A proposed methodology to explore the validity of this construct will then be proposed, and further defined in Chapter Three.

The Nature of Mergers and Acquisitions

Mergers and acquisitions are legally different transactions (Cartwright & Cooper, 1996). The Oxford American Dictionary defines an acquisition as: “an outright gain of something”, and a merger as “the joining or gradual blending of two previously discrete entities”. The literature surrounding post-M&A acquisition tends to treat these terms synonymously (Cartwright & Cooper, 1996).

Definitions

According to Gaughan (2002), a merger is: “a combination of two corporations in which only one corporation survives and the merged organization goes out of existence” (p. 7). In a merger or acquisition, the acquiring company assumes the assets and liabilities of the merged company. There are two types of purchases. One is a “stock” purchase, where the acquiring company purchases all the assets and liabilities, including those related to human capital. The other type of purchase is an “asset” purchase, where only the physical assets of an acquired company are purchased. For the purposes of this dissertation, only stock purchase acquisitions will be explored.

An acquisition is further defined as being similar to a merger, but is considered a more aggressive type of organizational combination process. A merger implies equality between the two organizations, even though one may be larger in size versus the other. An acquisition on the other hand implies a takeover, where the acquiring firm takes over an acquired organization, with no belief on the part of the acquiring firm’s leadership that there is any equality involved in the combination process (Bower, 2001; Cartwright & Cooper, 1996; Galpin & Herndon, 2000; Gaughan, 2002). The economic process for both is similar except for those instances where an acquisition is considered hostile, and therefore carries an aura of aggression not normally found in mergers (Gaughan, 2002). Mergers have also been described as friendly and unfriendly. But again, the “friendliness” of the merger depends upon the point of view of the participants, and whether they are the ones acquiring, or being acquired (Cartwright & Cooper, 1996; Gaughan, 2002). In the literature, the terms mergers and acquisitions are often used interchangeably when discussing the impact of this type of change on organizations and employees (Cartwright & Cooper, 1996).
Classifications of Mergers and Acquisitions

There are several merger and acquisition classifications models. The popular models categorize mergers by the economic incentive for the merger. The categories are horizontal, vertical or conglomerate mergers (Cartwright & Cooper, 1996; Gaughan, 2002). A horizontal merger occurs when two competitors combine. A vertical merger is a combination of companies that have a buyer-seller relationship (Gaughan, 2002), or a successive process relationship (Cartwright & Cooper, 1996). A conglomerate merger occurs when neither of the aforementioned merger conditions exist, and the two organizations are completely unrelated (Cartwright & Cooper, 1996; Gaughan, 2002). A fourth category has been developed in this model that is called a concentric merger. In a concentric merger, the organization acquired is in an unfamiliar, but related field into which the acquiring organization wishes to expand (Cartwright & Cooper, 1996).

A second model categorizes mergers and acquisitions by strategic intent (Bower, 2001). According to Bower (2001), acquisitions occur for five reasons:
1. To deal with overcapacity through consolidation in mature industries;
2. To roll-up competitors in geographically fragmented industries;
3. To extend into new products or markets;
4. As a substitute for research and development: and
5. To exploit eroding industry boundaries by inventing an industry (p. 94).

A fourth model titled “Acquisition Postures” classifies mergers and acquisitions by the level of cooperation between employees of the merging organizations (Pritchett et al., 1997). Figure 2 illustrates this model cooperation-based model.

Figure 2. Acquisition Postures

<table>
<thead>
<tr>
<th>Rescue</th>
<th>Collaboration</th>
<th>Contested Situation</th>
<th>Raid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative</td>
<td></td>
<td></td>
<td>Adversarial</td>
</tr>
</tbody>
</table>

A rescue, which is the most collaborative of mergers, can be either proactive or reactive. A proactive rescue occurs when a firm seeks out help, looking for some type of relief (Pritchett et al., 1997). A reactive rescue occurs when a firm is reacting to a hostile takeover, and the need for a “white knight” is necessary. A white knight can either be another firm, or a bank or other type of institution that provides the appropriate type of relief required to stave off a hostile takeover (Pritchett et al., 1997). During a rescue, the acquiring entity has to quickly apply a remedy to the issues that led to the rescue. Often this involves immediate post-merger restructuring, reorganization, employee layoffs, the selling of physical assets and other economic processes that negatively impact employees. Also common is the dismissal of the senior leadership who are believed to have “caused” the rescue to occur (Pritchett et al., 1997).

During a collaboration merger, both parties want to positively participate in the merger process. The merger negotiation process is not forced, and both parties are actively seeking to merge to form one organization. Care is taken to ensure that no one is surprised by the merger,
and a great deal of consideration is applied to the due diligence negotiations, communications, and post-acquisition integration processes. A majority of mergers fall into this category (Cartwright & Cooper, 1996).

A contested merger occurs when: “...only one of the two parties (usually the acquiring firm) wants to make a deal, or the two firms want very different deals” (Pritchett, 1997, p.26). Another type of contested situation occurs when multiple or progressive suitors compete for the same company. Other than a raid, the contested merger can be the most time-consuming and emotionally exhausting experience for employees from all participating entities (Mirvis, 1985). Since these types of mergers often take longer than a rescue or a collaborative approach, employee engagement in the initial phases of due diligence and deal negotiations is very intense (Pritchett et al., 1997).

In a raid, the acquiring company initiates a hostile takeover of another business entity. This is considered the least desirable of merger processes, due to the perceived negative impact of the raid on both parties. Raids were popular in the 1980s, as acquisition experts sought out firms with large cash reserves in either their pensions or due to undervalued physical assets such as land and inventory. Raiding as a merger strategy is more focused on asset versus stock mergers, where the economic motive is the immediate cash achieved in dissolution of the acquired organization through the sale of undervalued assets (and the gutting of over funded pension plans) after the acquisition (Gaughan, 2002). Since the early 1990s, raids have been increasingly rare, more due to the fact that almost all firms have adopted “poison pill” strategies which eliminate the benefits gained from a raid, rather than the fact that the post-merger success of raids is near zero (Gaughan, 2002).

**Process**

In terms of process, mergers and acquisitions follow roughly the same business model. After the merger is sourced and announced, the first step of the M&A process is due diligence. During the due diligence phase of the acquisition, the acquiring organization is allowed to “look under the hood” of the to-be acquired company. This process is similar to the discovery phase of a trial, where functional teams of experts review the economic and operational health of the potential acquisition. Currently, for acquisitions in the United States there are mandated processes for primarily the legal and accounting related functions (Gaughan, 2002). It is during the due diligence phase of the acquisition where functional leaders from both organizations begin to establish relationships and gain further understanding of each other’s businesses (Galpin & Herndon, 2000; Hilborn et al., 1999; Marquardt, 1998). Depending upon the nature of the acquisition, the due diligence period can be from ten days to two months. Often, as in the case of multiple bidders, due diligence processes can take over six months to a year.

After the due diligence process is competed by the acquiring firm, the data are analyzed and negotiations are initiated. This negotiation process is termed either hostile or friendly depending upon the nature of the acquisition. It is during this period when the purchase price and related economic performance metrics are set by the acquiring organization. During the negotiations process, the terms of the merger are established, and employee-related issues such as retention, health and welfare plan management and employment are discussed. If the negotiations are successful an official purchase or change of control date is established.
Depending on the nature of the acquisition, the negotiated purchase of the to-be acquired company must also receive final approval or endorsement by relevant parties such as the respective boards of directors, government entities and in some cases, union organizations (Gaughan, 2002).

At or near the change of control date the post-acquisition integration process formally begins. Since the acquisition process requires the entities to sustain separate legal structures, pre-change of control date integration processes are limited to pre-positioning resources. These resources are then employed immediately after the official transfer of ownership to the acquired organization.

Another model examines the acquisition process from an organizational change perspective. According to Marks and Mirvis (1998), there are three temporal phases of an acquisition. The first phase is the pre-combination phase, which focuses on the activities of the acquiring firm. During this phase, the leadership of the acquiring firm develops strategic and operational processes to support the merger. This includes finding the right company to purchase and defining, executing and completing the due diligence and negotiations process. During this pre-combination phase initial functional relationships between the two organizations are established, and process-focused communications are shared with the employees of both firms. This communication process also supports the psychological preparation required by both employee groups to support the transition. Preferably, joint acquisition teams made up of employees from both organizations, are tasked to build relationships and processes which will support the progressive transition to the subsequent two stages of the model.

The second phase of this model is called the combination phase. During this phase of the merger, the focus shifts from process to managing expectations (Marks & Mirvis, 1998; Mirvis, 1985). During this phase, the goal of the acquisition teams is to complete transitional tasks during a period of great organizational stress and chaos (Marks & Mirvis, 1998). It is also during this period where employee commitment issues, manifested through perceived organizational culture clashes, may become a barrier to the successful completion of the combination phase (Adams, 2002; Cartwright & Cooper, 1996; DeVoge & Spreier, 1999; Habeck et al., 2000; Hilborn et al., 1999; Hodge, 1998; Krell, 2001; Marks & Mirvis, 1998).

The final phase is titled post combination. In the post combination phase, the two entities are completing the transactional and transformational processes necessary to create one new organizational culture. During this phase, processes and cultural issues are reconciled to the degree necessary to sustain operations. And while not all issues are completely solved, the employees of the new organization are expected to sustain operations within the new culture (Marks & Mirvis, 1998).

While most researchers believe post-acquisition integration occurs after the official change of control, some argue that integration begins during the due diligence phase (Galpin & Herndon, 2000; Hickins, 1999; Hilborn et al., 1999; Jones & Pollard, 2000; Marquardt, 1998). This argument is supported by the position that it is during the initial due diligence period when leaders of both organizations begin to explore the differences and unique attributes of each other’s respective organizational cultures (Axel, 1997; Bijisma-Frankema, 2001; Hayes, 2001).
For the majority of the acquired employees however, the integration process begins immediately after the official change of control date (Cartwright & Cooper, 1996; Fitzgerald, 2002; Habeck et al., 2000; Hodge, 1998; Kramer, 1999; Pritchett et al., 1997).

**Impact of the Acquisition on Acquired Employees**

According to Humpal (1971), from an organizational change perspective: “the event ‘merger’, therefore, defines a relatively large universe of similar cases of organizational change wherein the object of the change is to create one organizational system from two or more previously distinct entities” (p. 103). Exploring how an acquisition impacts the employees of the acquired firm is contributory to an understanding of how human capital impacts the success or failure of the acquisition. Prior to 1990, there had been little substantive research developed which explored acquired employees’ reactions to a merger or acquisition (Cartwright & Cooper, 1996). With the increase in recent merger and acquisition activities during the 1990s, an increasing number of studies have been completed which have examined this issue to some degree (Adams, 2002; Bijisma-Frankema, 2001; Bruhn, 2001; Daniel & Metcalf, 2001; Eberhart, 2001; Gadiesh et al., 2001; Gaughan, 2002; Krell, 2001; Wall, 2001). From these and related studies, researchers have viewed acquired employees’ reactions to a merger through several complementary lenses.

Common to all these lenses is the primary effect of disorientation and loss (B. Allen & Sharar, 2000; Cartwright & Cooper, 1996; DelVecchio, 1999; DeVoge & Spreier, 1999; Hayes, 2001; Kramer, 1999; Krell, 2001; Nahavandi & Malekzadeh, 1988; Newman & Krzystofik, 1993; Ozag, 2001; Pritchett et al., 1997; Risberg, 2001; Schaeffer, 1999; A. Schwieger et al., 1987; D. Schwieger & Denisi, 1991; Sierra, 1997; Singh, 1999; Troiano, 1999; Tynes, 1997; Viscio et al., 1999; Weber, 1996; Weber, Shenkar, & Raveh, 1996). Humpal (1971) provides a preview of these researchers’ positions when he states:

> Two complex social systems, A and B, must be integrated to produce C, a viable and successful third system- stronger, more profitable, more stable, synergistic, and so on. However, the conditions under which favorable system integration is to obtain (sic) are at best difficult. Organizational change of this magnitude creates uncertainty and anxiety among individuals in the merger pair. From the day of announcement, personnel at all levels are likely to begin thinking about the consequences of the combination for their careers. Tension, role conflict, ambiguity, distrust- in short, personal stress is perhaps an inevitable concomitant of merger (p. 104).

Employees of the acquired firm have shared their position that the acquisition process is “devastating” (Cartwright & Cooper, p. 41), and that there is a certain amount of “anticipatory mourning” (Astrachan, 1995) prior to the completion of the merger. Studies of acquired employees have compared the merger experience to personal experiences such as marriage, loss of a loved one, and assault (Cartwright & Cooper, 1996). Others have examined the response to a merger from a clinical psychology viewpoint and have developed theories which relate to the four lenses that are most commonly used to describe an employee’s reaction to a merger as follows: (a) marriage (Cartwright & Cooper, 1996), (b) separation anxiety (Astrachan, 1995), (c) the Kubler- Ross model (Brousseau, 1989; Mirvis, 1985; A. Schwieger et al., 1987), and (d) grieving for the loss of a significant other, which is a situation- based adaptation of the Kubler-Ross model (Newman & Krzystofik, 1993).
**Marriage**

Cartwright and Cooper (1993, 1996) take the position that: “Certainly, the imagery and terminology associated with a merger is highly emotive, and consistent with that used to describe intimate personal relationships such as marriage or parenting.” (p.39). Table 1 summarizes Cartwright and Cooper’s approach in using marriage terminology to outline the stages of the merger process.

Table 1

<table>
<thead>
<tr>
<th>Stage</th>
<th>Non-problematic</th>
<th>Problematic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Courtship</td>
<td>Voluntary, controlled</td>
<td>Imposed or uncontrolled</td>
</tr>
<tr>
<td>2. Marriage</td>
<td>Endorsed, accepted</td>
<td>Unendorsed, unaccepted</td>
</tr>
<tr>
<td>3. Honeymoon</td>
<td>Blissful, trusting</td>
<td>Rocky, untrusting</td>
</tr>
<tr>
<td>4. Marital allegiance</td>
<td>Fidelity</td>
<td>Open marriage</td>
</tr>
<tr>
<td>5. Interdependence</td>
<td>Silver Anniversary (Dependence)</td>
<td>Separation (Independence)</td>
</tr>
</tbody>
</table>

Cartwright and Cooper have in subsequent research modified their belief that the merger process is like a marriage and have stated that in some cases, the marriage model tends to underestimate the level of negative emotions surrounding the merger event (Cartwright & Cooper, 1996). From my analysis, which will be further explored in a subsequent section of this literature review, I believe that the marriage model can be used, but it needs to be expanded. In essence, the marriage model explores only one segment of the merger process. The marriage lens used by Jinks and Cartwright & Cooper is simplistic, and serves to tacitly orient the researcher to the problems associated with a merger. A more robust view of intimate personal relationships would lead the researcher to forward a cyclic model of marriage- divorce and remarriage as a lens through which to view the merger process. This cyclic model provided a more dynamic lens through which to explore the issues surrounding the dissolution of trust, negative emotions and re-establishment of commitment than a single- event marriage model. This cyclic model also introduces the position that the employee of the acquired organization is (a) experiencing a transformational journey, and (b) this commitment journey is confounded by the stress associated with the post- integration process.

**Kubler-Ross Model of Personal Bereavement**

Continuing along the thread that acquired employees’ reactions to a merger have similarities of behavior which mimic intimate personal transitions, the Elizabeth Kubler-Ross (1997) model of personal bereavement (Mirvis, 1985) provides another lens through which to view the transformational journey. The Kubler-Ross model (Kubler-Ross, 1997) as restated by Mirvis (1985), postures that the acquired employee passes through four stages before committing to a new organization. These stages are: (a) disbelief and denial, (b) anger through rage and resentment, (c) emotional bargaining beginning in anger and ending in depression, and finally (d) acceptance. Another model proposed by Hunsaker and Coombs (1988) provides an additional four steps past “acceptance”. These four steps are (a) relief, (b) interest, (c) liking, and (d) enjoyment (Hunsaker & Coombs, 1988). The model proposed by Hunsaker and Coombs closely mirrors the stages of divorce and remarriage, which will be explored later in this review.
Merger Syndrome

Building on the position that the two most important factors associated with increased employee stress during a merger are uncertainty and insecurity (Marks & Mirvis, 1998; Mirvis, 1985), Marks and Mirvis have identified common stress-induced behaviors exhibited by employees reacting to a merger which they have titled “merger syndrome” (Marks & Mirvis, 1998, p. 36). The behaviors associated with merger syndrome occur usually after the initial announcement of the acquisition. Employees who exhibit this syndrome are said to be: (a) overly hostile and aggressive, (b) withdrawn and despondent, or (c) they enter into a state of denial by banding together in a manner that fosters poor decision making (Astrachan, 1995; Marks & Mirvis, 1998; Mirvis, 1985).

Separation Anxiety

The uncertainty and stress associated with the merger have also evolved the position by Astrachan (1995) that employees of the acquired firm feel separation anxiety during the merger. Separation anxiety “is a distinctive anxiety associated with the frightening situation of having a relationship change drastically or end” (Astrachan, 1995, p. 32). Astrachan’s view of separation anxiety is different than Marks & Mirvis’ in that the Marks & Mirvis model (based on Kubler-Ross) views separation anxiety occurring immediately after a loss. For Astrachan (1995), separation anxiety is defined, in part, as: “the result of longing for an object to stay in the face of the reality that the object might leave” (p. 33), versus longing for an object in the face of the reality that the object cannot return. Employees of the acquired firm feel a sense of loss for different objects, which may include a loss of a certain way of doing work (relating to loss of organizational culture), a loss of connectivity to peers, subordinates or supervisors who are laid off or reassigned due to the merger, or individual loss of status or responsibility due to the merger (Astrachan, 1995).

Expectancy

“Mergers and acquisitions create an expectancy of change” (Cartwright & Cooper, 1996, p. 42). Employees of the acquired firm do expect a certain amount of change to occur as a result of the merger. What causes employee uncertainty and stress depends on the duration, depth, and velocity of this change (Astrachan, 1995; Conference Board, 2000; Douglas, 2000; Gandossy & Jeffay, 1995; Kramer, 1999; Krell, 2001). Ozag (2001) states that employees who survive a merger require a certain level of trust and hope in order to sustain the expectancy that they will prevail through to the completion of the merger process. This expectancy is challenged when the traditional means of reinforcing positive expectancy, such as open communications (D. Schwieger & Denisi, 1991) and employee-supervisor trust (Tynes, 1997) are hobbled by the chaos of the merger.

For acquired employees, mergers are difficult times of stress, uncertainty and confusion. The various models used to describe an employee’s reaction to a merger all share the position that, for the employee, this is a type of forced, negative change. It is interesting to note that other than the Kubler-Ross bereavement model, there is no research that views an employee’s reaction to a merger as the beginning of a transformational learning journey. Several researchers intimate that there are process steps which are similar to a learning journey (Mirvis, 1985; Pritchett et al., 1997), but no research to date has made the overt link to transformational learning theory. The marriage cycle has also been used to describe a merger (Cartwright & Cooper, 1996), but even
this interpretation is incomplete, as it implies a happy ending, and discounts the issue of commitment. Even the term re-commitment has not yet been used in the literature to describe how an employee re-establishes a relationship with a new organization after a merger.

The next section of this literature review will focus on employee-organization commitment, and will review the current research surrounding employee-commitment during mergers. Following this review, an exploration of antecedents to commitment will be explored through two different perspectives. The first will be in the field of adult learning, the second in family and marriage therapy.

Commitment

Employee commitment to the post-merger organization has been theorized as a crucial component to the success of a merger. (Bourantis & Nicandrou, 1997; Buono et al., 1985; Buono & Nurick, 1992; Cartwright & Cooper, 1993; DelVecchio, 1999; DeVoge & Spreier, 1999; Gandossy & Jeffay, 1995; Hicks, 1999; Hilborn et al., 1999; Kramer, 1999; Krell, 2001; Mirvis, 1985; Villinger, 1996; Viscio et al., 1999; Weber, 1996). Since the mid-70s through 1999, over 500 different studies have been published using organizational commitment as a focal variable (Eby, Freeman, Rush, & Lance, 1999). It has been well established in the literature that “the extent and quality of employee-organization linkages provide important consequences for the individual, for the organization, and for society” (Mowday, Steers & Porter, 1982, p.3), and, that: “organizational commitment has attracted more attention than any of the other forms of work commitment” (Morrow, 1993). Therefore, this section of the literature review will not attempt to provide an exhaustive review of the different forms and types of available organizational commitment models. Rather, the purpose will be to look at what research has been accomplished, which examines commitment in the context of a merger, and, of the models used to study commitment during a merger, which one should be used to answer the research questions posed in our opening dialogue.

Defining Commitment

There exists a wide range of definitions of organizational commitment (Meyer & Allen, 1997; Morrow, 1993; R. Mowday et al., 1982). Mowday, Porter and Steers (1982) developed their definition of commitment based upon a review of ten different studies of commitment. Their view was that employee-organization commitment was based upon understanding the different linkages between employees and organizations. From a study of these linkages, Mowday, Porter and Steers developed a definition of organizational commitment which includes both attitudinal and behavioral commitment (R. Mowday et al., 1982). Attitudinal commitment was defined as: “focusing on the process by which people come to think about their relationship with the organization. In many ways, it can be thought of as a mindset in which individuals consider the extent to which their own values and goals are congruent with those of the organization” (R. Mowday et al., 1982). Mowday and his colleagues (1982), defined behavioral commitment as: “relating to the process by which individuals become locked into a certain organization and how they deal with this problem” (p. 27). From these two types of individual commitment, Mowday and his colleagues have developed the following definition of organizational commitment (R. Mowday et al., 1982):

Organizational commitment is…the relative strength of an individual’s identification with and involvement in a particular organization. Conceptually, it can be characterized by three factors: (a) a strong belief in and acceptance of the organization’s goals and
values; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a strong desire to maintain membership in the organization (p. 27).

In addition to the above definition, Mowday, Porter and Steers emphasize that sustaining organizational commitment also requires a level of economic exchange between the employee and the organization (R. Mowday et al., 1982).

**Allen & Meyer Three Component Model of Commitment**

Allen and Meyer have proposed a three-component model of organizational commitment (OC) (N. J. Allen & Meyer, 1996). They agree with Porter and his colleagues that there is little consensus in the meaning of commitment, and after reviewing the model proposed by Mowday, Porter and Steers have evolved a different approach. Allen and Meyer hold the position that commitment is a “psychological state” (Meyer & Allen, 1997, p. 10), and “acknowledge that this state can develop retrospectively as proposed in the behavioral approach, as well as prospectively as advocated in the attitudinal approach” (Meyer & Allen, 1997, p. 10).

From their review of commitment definitions, Allen and Meyers noted that “common to various definitions of organizational commitment is ‘the view that commitment is a psychological state that: (a) characterizes the employee’s relationship with the organization, and (b) has implications for the decision to continue membership in the organization’” (Meyer & Allen, 1997, p. 11). Morrow (1993), in his complementary analysis of Allen & Meyer’s model, also defines organizational commitment as a “psychological attachment of a member to an entire organization, as opposed to commitment to various constituencies within an organization” (p. 73).

Allen and Meyer’s three component model added the components of continuance and normative commitment to Mowday, Porter and Steers’ attitudinal (now termed affective) commitment (Meyer & Allen, 1997). This was done as a result of Allen and Meyer’s realization that: “the diversity in the conceptualization measurement of organizational commitment made it difficult to interpret research results. Thus they proposed a model which synthesized existing theoretical and empirical research about affective, continuance and normative commitment” (Ozag, 2001, p. 55).

Affective commitment, which has recently been identified as the most studied form of employee-organization commitment (DeLoria, 2001; Morrow, 1993; Ozag, 2001), is defined as: “the employee’s emotional attachment to, identification with, and involvement in the organization. Employees with a strong affective commitment continue employment with the organization because they want to do so”(Allen and Meyer, 1997, p. 13).

Continuance commitment, which evolved from calculative commitment, is an extension of Becker’s side-bet theory (Becker, as cited in Morrow, 1993, p. 99). Calculative commitment was defined as “a structured phenomenon which occurs as a result of individual-organization transactions and alterations in side-bets or investments over time” (Morrow, 1993, p. 75). This type of commitment focuses on things or objects which might be lost if an individual were to leave an organization, and the belief that an individual remains with an organization in order not to lose certain benefits (Morrow, 1993). According to Allen and Meyer (1997), continuance
commitment: “refers to an awareness of the costs associated with leaving the organization. Employees whose primary link to the organization is based on continuance commitment remain because they need to do so” (p. 11).

Normative commitment, developed by Allen and Meyers, reflects “a feeling of obligation to continue employment. Employees with a high level of normative commitment feel they ought to remain with the organization” (Meyer & Allen, 1997, p. 11). Of the three types of commitment components proposed by Allen & Meyer, normative commitment shows the least evidence to date of being a valid construct (Morrow, 1993).

**Antecedents to Allen & Meyer’s Commitment Model**

Meyer and Allen (Meyer & Allen, 1997) state the position that there are different antecedents for each of the three sub-scales of organizational commitment. According to Meyer and Allen (1997), antecedents for affective commitment can be separated into the following categories: (a) organizational characteristics (e.g., justice, fairness of policy implementation and communication of policy), (b) work experiences (e.g., job scope, autonomy, leadership relationships and job scope) and (c) personal characteristics, such as demographic variables and dispositional characteristics. Research into specific dispositional antecedents to affective commitment includes: (a) perceived self-competence, (b) strong work ethic, and (c) expectations of success (Meyer & Allen, 1997, p. 44-45). Meyer and Allen (1997) suggest time-based antecedents, which incorporate value, or economic based linkages to an organization are appropriate to continuance commitment. These variables include age and tenure. However, age and tenure: “are best thought of as proxy or surrogate variables of accumulated investments and perceived alternatives and not as direct predictors of continuance commitment” (p. 60). For normative commitment, Meyer and Allen (1997) state the position that the antecedents to this sub-scale include: (a) the level of organizational socialization, (b) the level of organizational investment in the individual, and (c) the belief that there is a psychological contract between the employee and the organization (p. 61).

In a recent meta-analysis of current research regarding the Allen & Meyer’s OC model, several antecedents are proposed (Meyer et al., 2001). One antecedent, which Meyer and his colleagues (2001) considered common to all three components of commitment, was: “Personal Characteristics” (p. 3). This antecedent was presented in a descriptive representation of the model, but was not covered in the text, leaving the researcher to wonder what the authors had in mind when they placed this attribute in the model.

**Price- Mueller Model**

The seminal work accomplished by Porter and his colleagues (R. Mowday et al., 1982) in the study of employee-organization linkages also led to the creation of a second model of employee-organization commitment. Building on Porter’s theme that employees enter in an exchange relationship with an organization based on an initial congruence of expectations and values, Price and Mueller developed a model of employee-organization commitment based on Expectancy Theory (Price & Mueller, 1986). This model, evolved from the results of several studies on turnover, is anchored on Vroom’s expectancy theory, augmented with learning gained from economics and sociology (DelVecchio, 1999). The model is comprised of nine
determinants of job satisfaction. These determinants were derived from then-current research in the area of employee job satisfaction.

The purpose of this original model was to develop an understanding of the influences of specific causal determinants of job satisfaction. Unfortunately, the original model had several shortcomings. These shortcomings include: (a) the exclusion of such variables as role conflict and supervisory support, (b) the position that the model does not weigh the impact of environmental determinants on job satisfaction, (c) personality variables are not considered, and (d) the impact of stress and social support are not included in the model (Agho, Mueller, & Price, 1993). These shortcomings became apparent as continued research into the determinants of job satisfaction increased the span of knowledge surrounding this model of employee commitment. Recently, Mueller and Price have taken on the task of revising the model based on new research in the area of employee-organization linkages. In 1993, Mueller and Price developed a revised model to address these shortcomings. The revised model added the personality variables of work motivation, positive affectivity and negative affectivity (Agho et al., 1993).

For the purpose of examining antecedents to employee commitment, it is important to note the addition of these personality variables to the model. The revised model was able to explain 57% of the variance in job satisfaction, versus 49% for the original Price-Mueller model (Agho et al., 1993). The addition of the durable personality attributes of positive and negative affectivity support the claim also presented by Allen & Meyers that there are certain attributes of individual personality which influence job satisfaction, and ultimately, employee commitment (Meyer et al., 2001). According to John Meyer and his colleagues, affective commitment has historically shown a stronger correlation than continuance commitment to normative commitment. Affective commitment has also been shown to have a stronger influence than normative commitment on continuance commitment (Meyer et al., 2001).

Current research has employed both models to explore antecedents to employee commitment during a merger. Gerard Del Vecchio (1999), in a recent doctoral dissertation, employed the Price-Mueller model to explore the possible link between employee-organizational commitment and employee job satisfaction. In his dissertation, Del Vecchio compared the level of employee-organization commitment between an intact organization and (a) an organization undergoing a hostile takeover, and (b) an organization completing a friendly merger.

Recently, David Ozag (2001) completed a doctoral dissertation where he used the Allen & Meyer organizational commitment model as a vehicle for determining the influence of hope and trust on merger survivors’ attitudes in a post-merger organization. Through his research, Ozag was able to demonstrate that the personality attributes of hope and trust did have a positive influence on post-merger employee commitment (Ozag, 2001).

**Familial Commitment**

Employee-organization commitment theory is based on the assumption that there exist between the employee and the organization certain linkages. These linkages may be emotional, economic, social or power-related (N. J. Allen & Meyer, 1996; A. Cohen, 1993; Meyer et al., 2001; R. Mowday et al., 1982). When these linkages are damaged, or severed, the stress placed
on the employee to “re-connect” to a new culture can be overwhelming. In the context of an acquisition, therefore, no dialogue concerning employee commitment can be complete without also considering the notion of commitment.

Committing to a new organization is similar in process to that of an individual moving from a marriage, through a divorce to a re-marriage. During the marriage-divorce –remarriage cycle, partners move from an initial link, or emotional bond, to divorce, or a severed emotional link (Ganong & Coleman, 1994). In the period of time where the partner is “severed” or “unanchored,” the partner feels a level of disequilibrium, manifested in increased stress due to having to cope, alone, with major and daily life stressors (Tein, Sandler, & Zautra, 2000). Upon remarriage, the emotional link is reconnected, but at a cost. Gone is the level of romanticism associated with the initial marriage, replaced by a more basic need for economic and emotional stability. According to Ganong & Coleman (1994), partners reasons for remarriage is more “pragmatic than romantic” (p. 49).

Another researcher has explored similarities between the mergers and the formation of stepfamilies (Murphy, 1998). In his research, Paul Murphy compares the six stages of remarriage as presented by Goetting (Goetting, as cited in Murphy, 1998) to the seven stages of a merger as defined by Buono and Bowditch (Buono & Bowditch, 1990; Buono et al., 1985). In his analysis, Murphy also explores the issue of recommitment through the lens of children who are faced with the challenge of committing to new stepfamily relationships. What is compelling are the insights gained from his qualitative research concerning children who have journeyed through the remarriage process. In his findings, Murphy states that children in stepfamilies felt that with regards to communications processes that “they were often the last to know” (Murphy, 1998, p. 5), and that children often felt a sense of “powerlessness” and “lack of control” (Murphy, 1998, p. 6) during the formation of the stepfamily.

The sense of powerlessness and lack of control have also been documented by other researchers who have studied the relationships of adolescents in recently created stepfamilies (Orbuch, Thornton, & Cancio, 2000; Robila & Taylor, 2001). In addition, these researchers have also forwarded the belief that children in newly created stepfamilies have a harder time recommitting to new parents and siblings to the same level of emotional depth than their initial families. Often these children, depending upon their age and level of emotional attachment to their original parents, are unable to form new stepparent bonds (Woodward, Fergusson, & Belsky, 2000).

This cycle mirrors the experiences of employees committing to a new culture. While there is no empirical evidence to suggest the belief that there is a lower level of commitment post versus pre- acquisition, qualitative evidence suggests that acquired employees are less committed to a new culture for some of the similar reasons children sometimes show a lower level of emotional commitment in newly formed stepfamily relationships. Indeed, Murphy states in the conclusions of his analysis that while his initial vision was to use merger lexicon to describe stepfamily formation, it was his belief that gaining a more thorough understanding of the various processes in stepfamily life “may have more to offer management theory and practice than vice versa” (Murphy, 1998, p. 7).
Section Summary

Two recent models of employee-organization commitment share the common position that there are certain dispositional personality characteristics, or attributes, which are antecedent to commitment. Lacking in the presentation and subsequent application of either model is a definition as to specifically what are these dispositional personality attributes. One researcher has proposed the traits of hope and trust (Ozag, 2001) as possible antecedents, another has examined demographic relationships (Singh, 1999), yet no research has yet been developed to explore dispositional personality attributes as possible antecedents to employee commitment during a period of organizational change.

Adult Learning and Change

There are two related fields of learning which have explored the issue of personal change during a period of stress. The first is the field of adult learning, specifically, Mezirow’s model of transformational learning. The second is the field of family and marriage therapy, specifically, the area of learning surrounding divorce and remarriage. Both fields offer insights into possible antecedents to employee-organization commitment during a time of stress, such as a merger. In the next section of this literature review, each of the two fields will be explored in order to determine if common antecedents exist which may be applicable to post-merger commitment.

Transformational learning

Transformational learning provides a compelling lens through which to view employee response to a merger. According to Henderson (2002): “Mergers, acquisitions, global competition, and technology are driving forces that demand rapid adjustments in the form of innovative organizational designs, new work processes, and new knowledge creation” (p.186). These transformational organizational changes in turn involve radical changes in how employees “perceive, think and behave at work” (Henderson, 2002, p. 186). Henderson’s position is that transformational learning is required to sustain transformational change in an organization (Henderson, 2002).

The belief that an employee committing to a new culture after a M&A reflects a process that is similar to a transformational learning journey that has been endorsed by many researchers who have studied employees’ reactions to M&As (Buono et al., 1985; Cartwright & Cooper, 1996; DeVoge & Spreier, 1999; Fried et al., 1996; Greenwood, 1996; Habeck et al., 2000; Hilborn et al., 1999; Jones & Pollard, 2000; Kramer, 1999; Krell, 2001; Marks & Mirvis, 1998; Marquardt, 1998; McConnell, 2000; Nahavandi & Malekzadeh, 1988; Newman & Krzystofik, 1993; Schein, 2000; Singh, 1999; Troiano, 1999; Tynes, 1997). In a recent study of transformational change theories, one characteristic cited by all theorists studied was the notion of commitment (Henderson, 2002). According to Henderson (2002): “The transformational change theorists point to involvement in the change process as producing commitment, whereas the transformational learning theorists see commitment as a matter of aligning the individual’s values and beliefs with those of the organization” (page 207).

Henderson (Henderson, 2000) also provides a summary of the transformational learning process as derived from the works of Jack Mezirow and Paulo Freire. In this summary, he states there are four key phases of transformational learning:

1. Reconstituting taken-for-granted assumptions
2. Reformulating one’s world view
3. Redefining the issues
4. Reorienting one’s life
1. Some disruptive event occurs in the learner’s life that challenges his or her view of the world.
2. The learner then critically reflects on beliefs, assumptions, and values that shape the current perspective.
3. The learner develops a new perspective to deal with the discrepancies surfaced by the triggering event.
4. The learner integrates the new perspective into his or her life. (p. 203).

Defining antecedents to transformational learning is difficult, as the main focus of the research to date has been on the process and outcomes of transformational learning rather than on those particular personality attributes that support a transformational learning journey. To date, no taxonomy exists of the personality attributes of a “pre-transformed” individual before the initiation of the learning journey.

One proposed antecedent to transformational learning has evolved through the study of successful action learning programs. Action learning has been defined as a process to facilitate transformational learning. According to Marsick (1990): “Action learning programs provide a framework for learning from experience that necessarily involves reflection, that typically involves critical reflection” (p. 156). Action learning is a tool to facilitate critical self-reflection. For action learning to be effective, individuals need to agree to participate in the learning process, and take an action-oriented approach, or what Marsick describes as a “proactive stance to learning” (Marsick, 1990, p 158). Being proactive has been mentioned as a necessary construct for the successful completion of transformational learning, but there is scant research available which provides for a clearer definition of positive affect in the context of transformational learning, other than to recognize the importance of an action-orientation to learning (Henderson, 2002; Marsick, 1990; Mezirow, 1990, 2000). In order for action learning, and the ultimate successful completion of a transformational learning journey, individuals need to approach the action learning process with a “recognized need to learn” (Yorks & Marsick, 2000, p. 262). Having a proactive orientation to action learning can be implied to be a key antecedent to successful transformational learning (Yorks & Marsick, 2000).

**Theory of Margin**

Another theoretical lens through which the employee’s commitment process can be viewed is that of Howard McClusky’s Theory of Power-Load-Margin. According to McClusky (McClusky, 1990), the key factors of adult life are the *Load* the adult carries in living, and the *Power* that is available to the individual to carry the Load. *Margin* was a formula expressed as a ratio between the Load (of living) and the Power to carry the load. McClusky (1990) states that: “Margin is a function of the relationship of Load to Power. In simplest terms Margin is surplus Power. It is the Power available to a person over and beyond that which is required to handle his Load” (p. 149). Therefore, the greater the Power factor, the greater the adult’s capacity for sustaining his or her personal Load.

Power refers to the resources one possesses in any given moment to meet and manage the Load. According to McClusky (Heimstra, 2002), Power:

…consists of a combination of such external resources and capacity as family support, social abilities, and economic abilities. It also includes various internally acquired or
accumulated skills and experiences contributing to effective performance, such as resiliency, coping skills and personality (p.3).

Two key attributes of Power, which have been studied in the context of individuals adapting to change, are pro-activeness and adaptive coping (Londoner, 1993). Another researcher has linked McClusky’s Power concept to assessing readiness for change (Hanpachern et al., 1998). It is McClusky’s assumption that a person needs to have banked a certain level of Power in order to begin and complete a learning journey (Knowles, 1990).

Neither transformational learning nor Theory of Margin research has adequately explored possible antecedents to either model. Both the transformational learning model and the action learning process begin with the assumption that an individual already has a level of adaptability and positive affect to successfully complete the journey or process. With regards to the theory of margin, there has been little research into further exploring the antecedents to Power, and their impact on coping with life’s challenges (Heimstra, 1993).

**Dispositional Antecedents to Commitment**

The following is a review of these two traits, which provides a general overview of each trait, along with a brief discussion of the relevance of the trait to the study of post-acquisition employee commitment.

**Adaptive Coping**

According to Judge, Thoreson, Pucik and Welbourne (1999): “one central reaction to organizational change involves the extent to which individuals...cope with the uncertainties that radical change introduces into their work lives” (p. 107). With regards to dealing with work stress, coping has been defined as: “the person’s cognitive and behavioral efforts to manage (reduce, minimize or tolerate) the internal and external demands of the person-environment transaction that is appraised as taxing or exceeding the person’s resources” (Folkman, Lazarus, Gruen and DeLongis, as cited in Judge, et al., 1999, p. 107). Research has identified two forms of coping which are (a) problem, or (b) emotion-focused. Problem-focused coping strategies deal directly with the stressor, while emotion-focused coping strategies focus on the emotional changes brought on by the stressor (Cheng, 2001; Folkman & Moskowitz, 2000; Judge, Thoreson, Pucik, & Welbourne, 1999; Kohn, Fillion, DeCicco, & Cunningham, 2001). Problem-focused coping strategies have been generally found to be more effective in dealing with work-related stress (Cheng, 2001; Folkman & Moskowitz, 2000; Judge et al., 1999).

There is related research in the fields of psychology and human resource development that has explored behavioral attributes relating to completing the transformational learning process. In the area of psychology, there has been recent research on several constructs which relate to an individual coping with change in the context of life events such as dealing with cancer, loss of family members and related personal stress situations (Kohn & O'Brien, 1997). In addition, in the field of human resources development, there has also been work done on examining behaviors that allow employees to sustain a high level of productivity in very stressful work environments (Brissette, Scheier, & Carver, 2002; Crant, 1995; Folkman & Moskowitz, 2000). Individuals who demonstrate both these traits have the ability to deal with a high and
sustained degree of ambiguity through adaptiveness in coping with the stress of change, and the ability to be proactive in managing the transformational learning journey.

Recent research in the field of family and marriage therapy has also reinforced the position that adaptive coping is required to deal with major life stressors (Carrere, Buehlman, Gottman, Coan, & Ruckstahl, 2000; Cohan & Cole, 2002; Tein et al., 2000). For example, according to Tein and her colleagues (2000), divorce is a source of both major stress and everyday stress, and that: “Major life stressors (such as divorce, bereavement and job loss) require a significant life readjustment involving a number of psychological and behavioral readjustments” (p. 28). One of the factors that buffer the negative effects of major and daily life stress attributed to major changes is active, or problem-focused coping (Brissette et al., 2002; Tein et al., 2000).

Parents experiencing a divorce or other high stress life change were found to exhibit less stress, as demonstrated by the level of abusive behavior, than parents who exhibited emotion-focused coping strategies (Tein et al., 2000). Children who successfully cope with the divorce-remarriage journeys of their parents have also been shown to have a high degree of resiliency and strong problem-focused coping strategies (Hetherington, 1999).

Paul Kohn and his colleagues (Kohn, Wood, & Pickering, 2002) state that: “Adaptiveness constitutes coping consistently so as to reduce distress, or at worst, not aggravate it” (p. 4). When coping with a stressful situation, an individual is presented with a choice of various responses. The more adaptive the response, the greater the degree of control the individual feels in responding to stress (Kohn, Wood, Pickering et al., 2002). There are various types of adaptive responses to stress, which include problem-focused, emotionally palliative, emotionally ventilative, and avoidance focused (Kohn & O'Brien, 1997). Predicting which individuals are able to demonstrate the ability to employ the proper type of adaptive response to stressful situations is important, as this trait could also be a predictor of post-M&A employee commitment. As adaptiveness is a reactive behavior (Kohn, Wood, & Pickering, 2002), it is important to understand also what predictive personality behavior exists which could predict an employee’s success at completing the transformation learning journey.

**Positive Affect**

Linked to the attribute of coping is the attribute of Positive Affect (PA). PA is a dimension reflecting one’s level of pleasurable engagement with the environment. High PA is composed of terms reflecting one’s enthusiasm, energy level, mental alertness, interest, joy, and determination, whereas low PA is best defined by descriptors reflecting lethargy and fatigue. Trait PA is a corresponding predisposition conducive to positive emotional experience: it reflects a generalized sense of well-being and competence, and of effective interpersonal engagement (Watson, Clark, & Cary, 1988).

According to Judge and his colleagues (1999): “Though scant research has focused on associations between PA and coping reactions to organizational change, several aspects of the PA construct suggest that individuals high in PA should be amenable to organizational change” (p. 109). Accordingly, successfully coping with organizational change requires an employee to have a positive disposition or Positive Affect (PA) towards the change process, and the impact of
the change on the individual’s meaning scheme (Folkman & Moskowitz, 2000; Watson et al., 1986; Watson & Slack, 1993). Watson and Clark’s (1988) brief definition of positive affect states: “PA reflects the extent to which a person feels enthusiastic, active, and alert. High PA is a state of high energy, full concentration, and pleasurable engagement, whereas low PA is characterized by sadness and lethargy” (p. 1063). Having a high PA is consistent with having a strong level of optimism (Brissette et al., 2002; Folkman & Moskowitz, 2000).

Alternatively, Watson and Clark define Negative Affect (NA) as: “a general dimension of subjective distress and unpleasurable engagement that subsumes a variety of aversive mood states, including anger, contempt, disgust, fear and nervousness, with low NA being a state of calmness and serenity” (p. 1063). These two variables are not dichotomous, but orthogonal (Watson & Clark, 1988). Positive Affect and Negative Affect have been shown to be a significant predictor of job satisfaction (Straw, et. al as cited in Watson & Slack, 1993). Positive Affect and Negative Affect have also been shown to be enduring traits, having demonstrated reliability in several longitudinal studies of job satisfaction (Watson & Slack, 1993).

Linked to the attribute of positive affect is the position that individuals with high positive affect also have an optimistic, or proactive view of life events, and through this proactive view are able to successfully cope with stress (Folkman & Moskowitz, 2000). Individuals who have a positive affect exhibit behaviors which are considered “proactive”(Watson et al., 1986). Positive affect allows an individual to take a predictive, or proactive stance in dealing with stress associated with life transitions (Brissette et al., 2002). In terms of meeting challenges, positive affect has been described in relation to the resolution of a stressful encounter as “favorable or successful” (Folkman & Moskowitz, 2000), and necessary to the “optimization” of outcomes (Freund & Baltes, 2002).

In a recent study of 205 managers, Michael Crant and Thomas Batemen found that proactive personality explained 5.7 percent ($p<0.01$) of the variance in charismatic leadership (Crant & Bateman, 2000). Michael Crant (2000) defines proactive behavior as: “taking initiative in improving current circumstances or creating new ones; it involves challenging the status quo rather than passively adapting to present conditions” (p. 436). A related definition defines proactive behavior as: “Behaviors that directly alter environments” (Bateman & Crant, 1993, p. 104). According to Bateman (1993): “The prototypic proactive personality, as we conceive it, is one who is relatively unconstrained by situational forces, and who effects environmental change” (p. 104).

Employees with proactive behaviors actively participate in change processes, hoping to alter work environments to their benefit (Bateman & Crant, 1993; Crant, 2000). This action orientation also reflects Kurt Lewin’s belief that people are more committed to solutions that they have helped design than to carrying out advice given by “experts” (Weisbord, 1991). Proactive individuals exhibit behaviors which reinforce an action-approach to learning, which is a critical component of both andragogy, (Holton et al., 1998; Knowles, 1989) and transformational learning leading to transformational change in organizations (Henderson, 2002).

Positive affect has been linked to adaptive coping. According to Lazarus, Kanner and Folkman (as cited in Folkman and Moskowitz, 2000, p. 649), the emotions associated with
positive affect: “...may provide a psychological break or respite, support continued coping efforts, and replenish resources that have been depleted by stress. According to Frederickson (as cited in Folkman and Moskowitz, 2000), positive emotions: “...broaden the individual’s attentional focus and behavioral repertoire and, as a consequence, build social, intellectual and physical resources- resources that can be depleted under chronically stressful situations” (p. 649). Positive Affect has been shown empirically to promote creativity in thinking and problem solving (Isen, Daubman, & Nowicki, 1987), and as a buffer against adverse physiological consequences of stress (Freund & Baltes, 2002). Relating positive affect to commitment, children who had demonstrated a positive emotional state towards stepfamily formation were believed to have had a stronger influence on the survivability of stepfamily relationships than those children who entered the stepfamily formation process with a negative emotional state (Hetherington, 1999; Orbuch et al., 2000).

In terms of McClusky’s Theory of Margin, positive affect can be seen as a component of Power, supporting McClusky’s assumption that the higher the level of positive affect, the greater the level of Power available to an individual to manage the “load of living” (McClusky, 1990). Positive affect also has a link to transformational learning, in that the behaviors linked to positive affect, such as high energy, full concentration and pleasurable engagement (Watson & Clark, 1988), also contribute to the successful participation in action-learning processes, which facilitate transformational learning (Marsick, 1990).

Some research has led to the position that positive affect is causal to adaptive coping. According to Folkman and Moskowitz (2000): “People high in optimism, for example, are more likely to engage in problem-focused coping, which in turn is more likely to be associated with positive affect” (p. 651). However, causation between the two constructs has not yet been established to the point of certainty (Folkman & Moskowitz, 2000).

At this time, no research has been completed which examines the influence of positive affect or adaptive coping on employee- organization commitment. Recent studies of post-acquisition employee- organization commitment have focused on the influence of the personality attributes of trust and hope (Ozag, 2001) or as determinants of job satisfaction (DelVecchio, 1999). But no study has been completed which examines the influence of both variables on post-acquisition commitment

**The Influence of the Employee’s Perception of Acquisition Success and Organizational Tenure/ Status on Post Acquisition Commitment**

Recent studies of employee behaviors during acquisitions have led to the belief that the employees’ perceptions of the ultimate success of the acquisition have an influence on the acquired employees’ level of commitment to the new organization (DelVecchio, 1999; Nelson & Maurer, 1999; Ozag, 2001; Paterson, 2000; D. Schwieger & Denisi, 1991). From the literature, two factors have emerged that employees valued as critical to the perceived success of the merger. These two factors were: (a) adequate communications during the period immediately before, during and after the acquisition and (b) potential career development in the new organization.
Employees who believed they received adequate information regarding the progress of the merger through official lines of communications were more likely to have positive beliefs about the ultimate success of the merger than employees who felt they were kept in the dark about the merger progress (Balmer & Dinnie, 1999; Bijisma-Frankema, 2001; Bourantis & Nicandrou, 1997; Cartwright & Cooper, 1996; Fitzgerald, 2002; Galpin & Herndon, 2000; Gandossy & Jeffay, 1995; Habeck et al., 2000; Hilborn et al., 1999; Paige, 1999; Viscio et al., 1999). Furthermore, employees who felt their immediate supervisors or managers were effectively communicating the progress of the acquisition also had strong positive beliefs regarding the success of the acquisition (A. Schwieger et al., 1987; D. Schwieger & Denisi, 1991).

Career development, or professional growth was a second key factor in the employee’s perception of acquisition success. The employee’s hope for continued personal growth (Ozag, 2001), and professional development (McConnell, 2000; Nelson & Maurer, 1999; Paterson, 2000; Pritchett, 1996; Singh, 1999) after the acquisition led to the belief that personal success and the success of the acquisition are linked.

Recent studies have also shown that the employees from different levels of an organization have (organizational status) different perspectives and reactions to the impact of an acquisition (Bijisma-Frankema, 2001; Bouwen & Overlaet, 2001; Bruhn, 2001; Daniel & Metcalf, 2001; Greenwood, 1996). Senior leaders, because of their proximity and influence on acquisition decision making and communications processes, have been shown to have a strong resistance to committing to a new post-acquisition culture (Fried et al., 1996). On the other hand, employees with little vested interest either due to low tenure or organizational rank, have an easier time with the transition process (Cartwright & Cooper, 1993). Organizational tenure has been linked to continuance commitment, but has not been determined to be an antecedent to affective or normative commitment (Meyer & Allen, 1997).

The Role of Organizational Culture

The acceptance of a new organizational culture by acquired employees has been frequently postulated as key to the long-term success of a merger (Adams, 2002; Bourantis & Nicandrou, 1997; Braksick, 2000; Cartwright & Cooper, 1996; Covin et al., 1996; Weber, 1996; Weber et al., 1996). The influence of organizational culture on employee commitment during the time period immediately surrounding the change of control date however is less clear.

As part of their study of organizational issues surrounding mergers and acquisitions, Steven Applebaum and his colleagues have developed a definition of organizational culture which is a synthesis of the definitions proposed by Schein and Hatch (Applebaum, Gandell, Yorts, Proper, & Jobin, 2000). Applebaum states: “organizational culture has been defined as a pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to these problems” (Applebaum, et al., 2000, p. 653). From a socio-psychological lens, Daniel Katz and Robert Kahn forward the belief that a social system is comprised of: (a) role behavior of members, (b) the norms prescribing and sanctioning these behaviors, and (c) the values in which these norms are embedded (Katz &
Both of these definitions have in common the belief that antecedent to members of an organization behaving in a manner that reflects organizational norms, these behaviors need to be learned. And learning new organizational behaviors requires employees to actively participate in tasks and social discourse within an organization over an extended period of time (Katz & Kahn, 1978).

During the period immediately after an acquisition, newly acquired employees are in a transition state between the norms and values of the old organization, and those of the new. Because of the chaos associated with this transitional phase, acquired employees initially are more focused on the transactional nature of the acquisition, and less focused on learning those behaviors which will ultimately link them to the new organizational culture (Cartwright & Cooper, 1996). Therefore, organizational culture, and the impact of the new organizational culture on acquired employees’ levels of commitment during the period immediately following the change of control date are at best secondary. However, as the change of control date recedes into memory, organizational culture fit becomes an increasingly key determinant of employee commitment (Corporate Leadership Council, 2000; Gandossy & Jeffay, 1995; Krell, 2001; Kristoff, 1996; Mottola et al., 1997).

**Summary**

An employee of a company acquired by another organization experiences a profound level of change, both from an organizational as well as a personal perspective. For the acquired employee, this change process is often a negative experience, reducing an employee’s commitment to the enterprise. Research in the fields of adult learning and family and marriage therapy suggests that individuals with high levels of positive affect and adaptive coping are more likely to survive a period of forced change than those individuals who do not possess these dispositional attributes.

From the literature review there is an understanding that employee-organization commitment has several components. These components of commitment may have dispositional personality and demographic variable- related antecedents, which may have an influence on the level of employee-organization commitment. To date, no research has explicitly probed the specific personality and demographic antecedents to the Allen & Meyers ANC model of employee-organization commitment in a post-acquisition context. Specifically, no study has attempted to determine the influence of positive affect and adaptive coping on the three components of the Allen & Meyer’s employee-organization commitment model in the time period immediately following an acquisition.

It is important to understand the influence of positive affect and adaptive coping on employee-organization commitment for several reasons. First, the influence of specific antecedents to employee-organization commitment needs to be explored in order to gain a broader understanding of these relationships. Second, the time period immediately following an acquisition provides a unique context for the study of commitment during a period of change that has a fixed start date. Exploring what happens to employee-organization commitment in the context of organizational change will help practitioners gain insights into what may happen to commitment during other types of organizational change such as layoffs and restructurings.
The most difficult part of this study has been to find an organization that is beginning the post-acquisition integration process in time to complete data collection. In addition to the need for congruence in timing, finding an acquired organization that is willing to host a post-acquisition study has been a challenge. Major factors in this challenge included: (a) the host organization’s ability to accept the data collection event as a possible intervention into the post-acquisition integration process, as well as (b) the need to have a strong level of endorsement or support from senior management.

Fortuitously, with the acquisition of TRW by Northrop Grumman, all three conditions were met. In the summer of 2002, Northrop Grumman announced that the acquisition of TRW would be completed by December, 2002 (Palmeri & Crock, 2002). Through personal and professional contacts, I was able to begin a dialogue with the Human Resource (HR) leadership responsible for TRW’s Information Systems and Technology (IST) Group, headquartered in Reston, Virginia. Through this dialogue I was able to receive the support and endorsement of TRW’s HR leadership for the collection of data from a sample of employees drawn from TRW’s IST Group.

In terms of the acquisition process, Northrop Grumman had recently completed two major acquisitions in 2001 with the purchase of Litton Industries and Newport News Shipbuilding (Palmeri & Crock, 2002; Sellers, 2002). With the purchase of TRW, Northrop Grumman will be the second largest defense contractor (after Lockheed Martin) in the United States, with a 2003 estimated sales volume of $26 billion (Palmeri & Crock, 2002).

Prior to Northrop’s pursuit of TRW, in 1998 Northrop Grumman had been in the process of being acquired by Lockheed Martin. The deal was terminated when the U.S. Justice Department vacated the merger based on anti-trust issues. Following the failure of the Lockheed-Northrop merger, Northrop Grumman began looking to expand its portfolio of defense related products and services. In the spring of 2002, Northrop began an aggressive pursuit of TRW. Initially, the acquisition was perceived by TRW and the stock market as a potentially hostile takeover. Especially since Ron Sugar, the former number two executive of TRW, was now the new number two executive of TRW, was now the new number two executive of Northrop Grumman (Sellers, 2002).

TRW became a takeover target due to what some analysts believed was a “loss of focus” on its core defense business (Palmeri & Crock, 2002). During the late 1990s TRW had attempted to reduce its over-reliance on defense related contracts, and branched out into automotive-related businesses such as brake linings and electronic components. This bifurcation of resources, and the impact of a downturn in both the auto and defense markets, reduced TRW’s overall financial viability to a point where the company became an acquisition target (Palmeri & Crock, 2002; Sellers, 2002). Northrop Grumman exploited TRW’s financial straits, and eventually Northrop Grumman completed a successful bid to acquire TRW early in 2002.

Under current terms of the acquisition, TRW will divest itself of all automotive-related businesses. Northrop Grumman has stated to TRW employees that the remaining product lines will remain intact, and that a one to two year “hold separate” agreement will ensure not only
separate lines of authority, but also ensure a continuity of health and welfare plans for former TRW employees who were acquired as part of this acquisition. No organizational changes (other than senior reporting relationships) would occur during the two years in which the hold separate agreement would be in place. Individual career development of former TRW employees would be expanded to include opportunities within the legacy Northrop Grumman organization.

The aforementioned background information concerning the Northrop Grumman acquisition of TRW sets the context for the research into post-acquisition employee commitment. Chapter Three will provide the framework for investigating how positive affect, adaptive coping, organizational tenure, job rank and employee perception of acquisition success influence employee commitment during the post-acquisition period.
CHAPTER III- METHOD

Conceptualization

Research shows that over 50% of North American business acquisitions fail as measured by change in shareholder value (Hamel, 2000). Recent literature suggests that the major reason for this high rate of failure is due to employees not reaching a level of productivity that is equal to or greater than that of the two entities prior to their combination. Specifically, it is believed that some employees from the acquired entity have low commitment to the new post-acquisition organization during the first 90 days of employment, leading to reduced productivity.

Employee commitment to the organization has been a widely studied concept. In recent years, the concept of employee commitment has been studied in numerous contexts (DeLoria, 2001; Meyer & Allen, 1997). There have been few studies, however, which have examined employee commitment in the workplace after an acquisition by another business enterprise (DelVecchio, 1999; Meyer & Allen, 1997; Newman & Krzystofiak, 1993).

Purpose of the Study

The purpose of this study is to explore the research questions proposed in Chapter One and further explored through the literature in Chapter Two. These questions are:

Research Question #1.
What pattern of scores on the commitment scales over three time periods are exhibited by a group of employees involved in a merger of two companies?

Research Question #2.
To what extent are these patterns influenced by the organizational tenure and occupational status of group members?

Research Question #3.
To what extent are these patterns influenced by the level of positive affect and adaptive coping attributes of group members?

Research Question #4.
To what extent are these patterns influenced by the perception of success of the acquisition by group members?

This study will add value to the field of human resource development (HRD) by giving HRD practitioners an insight into (a) possible antecedents to, and (b) the influence of job level and organizational tenure on post-acquisition employee commitment. Understanding these differences will allow HRD practitioners to possibly predict the level of post-acquisition employee commitment during the due diligence phase of the acquisition process. Predicting the level of post-acquisition employee commitment may provide the HRD practitioner with an insight as to the overall success of the acquisition from a human capital perspective.

Sample

The sample is a group of TRW employees acquired by Northrop Grumman. The initial sample size was targeted at 300, which was determined to be ample for the completion of the data analyses. Due to the nature of the research, there are certain limitations that should be noted regarding the identification of this sample. The first issue was that the time-sensitive nature of
an acquisition does not allow for the execution of a systemic or random sample identification process. A second issue was that not all organizations were willing to have third party investigations of post-acquisition processes occur during a recognized time of organizational stress and chaos. Other issues (more fully explored in Chapter Two) that were taken into consideration included the nature and context of the acquisition as presented during the due diligence process. These issues include the projected level of integration, redundancy issues, shared resources, contractual relationships, hold-separate agreements, health and welfare plan integration, and communications processes.

**Instrumentation**

The instruments that will be used for this study originated from four sources. The first source is the 1996 version of the Affective, Continuance and Normative (ACN) questionnaire (N. J. Allen & Meyer, 1996). The ACN is a 23-item scale measuring three separate types of organizational commitment that employs a 1-7 Likert response scale. The second is the Positive and Negative Affect Scale (PANAS) (Watson & Clark, 1988). The PANAS is a 20-item self-rated affect scale, which includes 10 items measuring positive affect, and ten items measuring negative affect. The third instrument will be the Personal Functioning Inventory (PFI) (Kohn, Wood, Pickering et al., 2002). The PFI is a 30-item instrument employing a 1-5 Likert response scale that measures adaptiveness in coping. Permission to use these three instruments has been granted from their respective authors.

A fourth instrument titled the Employee Perception of Acquisition Success (EPAS) was derived from: (a) a survey developed to measure attitudinal change during a merger (Singh, 1999) and (b) an informal survey of human resource practitioners and employees who had recently completed a merger. This nine-item instrument reflects questions regarding the employee’s perception of the success of the acquisition, along with items that measure the employee’s perception of communications regarding the merger and individual career/job factors. The EPAS uses a 1-5 Likert scale to measure employee belief in the perceived success of the acquisition. Demographic data regarding the employee’s job status, organizational tenure and years of work experience was collected. A review of each instrument’s background is provided below.

**Affective, Continuance and Normative Commitment**

There are several current constructs that are available to measure employee commitment. One of the more popular, and the one most heavily debated, has been the Affective, Continuance and Normative Commitment (ACN) construct developed by Allen & Meyers (N. J. Allen & Meyer, 1996). This commitment construct consists of three distinct sub-scales, each measuring a different form of employee-to-organization commitment. The ACN is a multidimensional construct developed to test Allen & Meyer’s theory that employee commitment to an organization is through an exchange of behavior for valued rewards. The ACN questionnaire has demonstrated past reliability in previous studies with a wide variety of sample groups (N. J. Allen & Meyer, 1996; DeLoria, 2001; Morrow, 1993). Through the early 1990s research in the area of employee-organization commitment has focused on the impact of organizational commitment on turnover, absenteeism, job satisfaction and other constructs that were considered expressions of commitment. Since 1995 research has expanded the belief that there are also distinct antecedents to employee-organizational commitment (Meyer et al., 2001).
Specifically, recent literature suggests that there are several antecedents to the ACN organizational commitment model (Bateman & Crant, 1993; Meyer et al., 2001). One of these antecedents has been broadly defined as personality characteristics (A. Cohen & Gattiker, 1992; Datta, 1991; Meyer et al., 2001). Several researchers have suggested that there are several elements of personality that may explain some of the variance in employee-organization commitment after an acquisition (Kohn & O'Brien, 1997; Pulakos, Arad, Donovan, & Plamondon, 2000).

**Positive Affect**

One of the two traits of personality that may have an influence on commitment is the construct of positive affect (PA). PA “reflects the extent to which a person feels enthusiastic, active and alert” (Watson & Clark, 1988, p. 1063). A scale to measure positive and negative affect was developed by Watson & Clark. This scale is called the Positive and Negative Affect Schedule (PANAS) (Watson & Clark, 1988). The PANAS is a 20-item self-rated affect scale where ten items measure positive affect, and ten items measure negative affect. The scale has been shown to be “highly internally consistent, largely uncorrelated, and stable at appropriate levels over a two-month period” (Watson & Clark, 1988, p. 1068). Watson and Clark conducted two-month retests of the PANAS scales in samples of 502 and 399 undergraduates. They obtained stability coefficients of .70 and .64 respectively, for the PANAS Negative Affect scale, and .71 and .59 respectively for the Positive Affect scale.

In another study of adults, the alpha reliabilities of the PA and NA scales were .86 and .87 respectively (Watson & Clark, 1988). Item validity for the PANAS was also factored, and proved a strong primary loading factor of .5 or greater (Watson & Clark, 1988). Watson and Clark (1994) in a subsequent test-retest measure of reliability over a two month period (using a population of 502 and 399 subjects respectively), obtained a stability coefficient of .70 and .64 for negative affect, and .71 and .59 respectively for the positive affect scale (David Watson & Lee Anne Clark, 1994).

There are two reasons why the undergraduate sample may have lower stability than the adult sample. First, the undergraduate respondents went through a major life transition over the course of the study, with many of them graduating at some point during the retest period. Second, several studies have determined that personality continues to develop and evolve past the high school years and often into the mid-twenties. Because the undergraduate respondents were still only in their mid-twenties at the final assessment, according to Watson and Walker: “it seems reasonable to expect that they will yield lower stability estimates than general adult or older adult samples” (Watson & Walker, 1996, p. 569).

**Adaptive Coping**

The second personality trait, which may be antecedent to employee commitment, is that of adaptiveness in coping (adaptive coping). Adaptive coping may be defined as: “...adapting consciously to such stressors as hassles, traumas, and negative life events (such as acquisitions)...” (Kohn & O'Brien, 1997, p. 4). There have been two consistently identified forms of coping. One is problem-focused coping, which is directed at remedying a threatening or harmful situation. The other is emotion-focused coping, which is the management of
emotions surrounding a stressful situation. Research indicates that problem-focused coping is a predictor of positive adaptation (Kohn & O’Brien, 1997). As research suggests that dealing with organizational change has more attributes which are related to problem-focused coping (Ashford, 1988; Kohn, Wood, & Pickering, 2002), measuring this form of coping was considered appropriate for use in the context of measuring post-acquisition commitment.

An instrument to measure positive adaptiveness in coping is titled the Personal Functioning Inventory (PFI). According to Kohn and his colleagues, the PFI instrument was developed based on the position that: “... people who coped adaptively followed the principles underlying the choice of adaptive alternative responses to stressful situations and rejection of maladaptive alternatives” (Kohn, Wood, Pickering, et al. 2002, p. 7). The PFI: “...showed good internal consistency in an adult population, alphas of 0.92 and 0.89, and in two student samples with alphas ranging from 0.86 to 0.91. Its stability over three weeks, a test-retest correlation of 0.90, is high enough to support its claim to be a dispositional measure” (Kohn, Wood, Pickering, et al. 2002, p. 21). The PFI is a 30 item 1-5 Likert scale survey composed of questions that measure the individual’s style of dealing with personal problems. Recent research leads to the assumption that the personality constructs of positive affect and adaptive coping are, in the post-acquisition context, both important antecedents to employee-organization commitment (Ashford, 1988; Brissette et al., 2002; Cheng, 2001; Judge et al., 1999; Somerfield & McCrae, 2000). At this time, no research has evolved to link these two constructs with the ACN scale in order to establish a relationship between these instruments.

Reliability estimates will also be computed for the PANAS and the PFI using Cronbach’s alpha. Since the PFI is a relatively new instrument, there is currently limited research on the reliability of this instrument (Kohn, Wood, Pickering et al., 2002). Because of this, a test-retest measure will be computed for this instrument.

**Employee Perception of Acquisition Success**

Recent research has surfaced the position that an employee’s perceived view of the success or failure of an acquisition may have an influence on morale (DeLoria, 2001; Greenwood, 1996; Habeck et al., 2000; Ozag, 2001; D. Schwieger & Denisi, 1991; Singh, 1999). These views are based on: (a) the employees perception of the impact on individual career development (Schaeffer, 1999), (b) the amount and type of formal communications from leadership regarding the progress of the acquisition (Paige, 1999), and (c) how the employee perceives the perceived success of the merger (Eberhart, 2001; Singh, 1999). As the EPAS was constructed based on data gathered from several sources, a reliability estimate using Cronbach’s alpha, and a factor analysis will be completed to determine validity.

**Data Collection**

Data collection was done at three different dates, beginning with the official change of control date. The first survey was administered within 24 hours of the official change of control date. The first survey included demographic data (occupational status, organizational tenure and years in the workforce). All three surveys are comprised of the PANAS, the PFI and the ACN and the EPAS (see Appendix A for a copy of these instruments). The second and third surveys were administered 30 and 60 days respectively after the change of control date. The reason for repeating the re-polling of both dispositional personality scales is the belief that while the
attributes of positive affect and adaptive coping are considered fairly stable dispositional personality traits (Crant, 2000; Crant & Bateman, 2000; Kohn, Wood, Pickering et al., 2002), the reliability of these instruments needs to be recalculated in the context of this study.

The three data collection dates were chosen after a review of the literature suggested that the period immediately after a change of control is the most intensive transactional period of the acquisition (Cartwright & Cooper, 1996; Nahavandi & Malekzadeh, 1988). Data were collected from a sample of employees who are in the process of completing a post-acquisition commitment process. The first step in the collection of the data was to seek out and select an organization that: (a) had a defined change of control date within the timeframe required to complete his dissertation, and (b) approved the administration of the survey during the period of post-acquisition required by the study.

TRW’s Global Information Technology Group, which was acquired by Northrop Grumman in December of 2002, agreed to participate in this survey process. Permission had been given by the human resource leadership of TRW’s Global Information Technology Group to administer the survey during the post-acquisition integration period. This division of TRW has 1,500 employees located in over 100 geographically dispersed sites in North America. A sample of 300 employees was initially randomly selected to participate in this survey.

Since this is a study in grouped variable change, each employee, or case, was given a three-digit random number as a pass code to enter survey response data into the web-based instrument. These survey case numbers were randomly assigned. Employees selected to participate in the study were given a standard non-disclosure agreement, and in addition to this agreement, a cover e-mail was be sent to each participating employee with their individual pass-code.

Survey data were collected through a web-based data collection tool. A web-based tool was chosen due to the following: (a) the participating sample of employees are located across North America at over 200 work sites, (b) these employees are often away from their work site or telecommute, making non-web based survey data collection impractical, and (c) the desire on the part of the host organization to minimize the invasiveness of the data collection process during the post-acquisition period. It was also felt that this web-based approach would support the anonymity of the process, as well as facilitate the collection of the data. As the participants were required to complete three separate surveys at three distinct times, the communication of the data collection process was via e-mail, and coordinated with the host organization’s human resources leadership responsible for supporting the collection of this data.

**Answering the Research Questions**

Data analysis was facilitated using SPSS version 11.5 (SPSS, 2002). The nature of the research questions suggests the use of hierarchical regression, with the possibility (depending on the strength of the relationships identified through regression techniques) of ultimately employing path analysis as an appropriate analytical tool.

The descriptive characteristics of all the variables were explored prior to the creation of responses to the research questions. During the exploration of each variable, internal reliabilities
and changes in the descriptive characteristics of the responses over the three time periods were analyzed to determine if there were any unusual anomalies which required further exploration or review. A full model regression, to include correlation matrices, was also created to facilitate the understanding of the relationships among the variables at T₁, T₂, and T₃.

Hierarchical regression was the initial method of data analysis. Through hierarchical regression procedures, coefficients of determination were established, using the summary of the research questions tacitly mapped in Figure 1 as a “causative road map”. Through an analysis of the relationship between the exogenous and endogenous variables, a determination was made whether or not to pursue further analysis using path analysis techniques. Beginning with the application of a hierarchical regression approach, the data were analyzed in order to answer the following research questions.

**Research Question #1**
What pattern of scores on the commitment scales over three time periods are exhibited by a group of employees involved in a merger of two companies?

To answer this question a profile analysis, or one-way repeated measures design was used to determine the changes in each of the three commitment sub-scales (affective, normative and continuance) over the three time periods. A repeated measures design was computed to determine if the changes in the means scores of the three components of the commitment model were significant over time.

**Research Question #2**
To what extent are these patterns influenced by the organizational tenure and occupational status of group members?

The literature implies a link between organizational tenure and continuance commitment, and limited insights into how total years in the workforce relates to commitment (Meyer et al., 2001; Morrow, 1993). Therefore, an additional variable measuring the employee’s total years in the workforce was added to the survey.

Since each of the three forms of commitment in the Allen & Meyer’s model are theoretically orthogonal, a different hierarchical regression analysis was done for affective, normative and continuance commitment.

**Research Question #3**
To what extent are these patterns influenced by the level of positive affect and adaptive coping attributes of group members?

The literature provides a supposition that positive affect may influence adaptive coping (Folkman & Moskowski, 2000). This supposition was tested through a linear regression analysis of positive affect on adaptive coping scores at T₁, T₂, and T₃. The potency of the coefficient of determination was used to determine if there was a significant relationship between the independent variable of positive affect, and the dependent variable of adaptive coping at T₁, T₂, and T₃. A hierarchical regression analysis was employed to determine the influence of both
independent variables on the three components of the Allen & Meyer’s commitment model at $T_1$, $T_2$, and $T_3$.

**Research Question # 4**

To what extent are these patterns influenced by the perception of success of the acquisition by group members?

The EPAS scale was created to measure the employee’s perception of acquisition success based on the employee’s belief that: (a) the acquisition will meet financial targets, (b) the success of the acquisition will contribute to the career development of the employee, and (c) the employee is receiving adequate communications regarding the success of the acquisition from peers and supervisors.

Since the EPAS scale was constructed to meet the needs of this particular study, a reliability analysis was completed to determine the internal reliability of the instrument. Based upon the reliability study, a modified EPAS scale was developed for use in the linear regression analysis of the influence of the EPAS on the three components of the commitment model.

**Summary**

The period immediately after an acquisition is a time of stress and mixed emotions for acquired employees. During the initial post-acquisition period, acquired employees begin to commit to a new organization. According to the literature, this commitment process may be influenced by dispositional personality traits such as positive affect and adaptive coping. Certain demographics such as organizational tenure and occupational status have been shown to have an influence on commitment, along with the employee’s perception of the success of the acquisition. Given the nature of the research questions, a qualitative approach was selected for data collection. Using a web-based survey comprised of instruments that measured positive affect, adaptive coping, commitment, employee perception of acquisition success along with the appropriate demographic variables, data collection were planned for three distinct periods of time after the acquisition.
CHAPTER IV - ANALYSIS

Data Collection

On December 11, 2002, TRW shareholders approved the merger with Northrop Grumman (Sellers, 2002). Beginning several days earlier, 170 employees of TRW’s Global Information Technology Division were individually contacted by e-mail and invited to participate in a voluntary employee survey regarding post-acquisition employee commitment. Initially, 300 employees were targeted, but due to organizational changes immediately after the acquisition, 130 employees were no longer available to participate in the survey due to the sale of a subordinate division immediately after the acquisition. Of the 170 employees invited to participate, 89 responded to the first survey.

Of the 89 responses, 58 were complete responses. The remaining 31 responses were “false starts”, in that an employee survey ID number was entered, but there were no subsequent completed responses by the respondent to any of the questions on the survey. Unfortunately, due to the nature of the relationship with the host organization, I was unable to contact the 31 false start respondents to determine the reasoning behind their decision not to complete the survey.

On the first month anniversary of the change of control date, a second e-mail was sent to the 58 employees who responded to the first survey, asking for their participation in completing the second of the three surveys. Fifty-three employees responded to the second (January) survey. The five employees who did not respond had been laid off in the previous thirty days. On February 11, an e-mail was sent to the remaining 53 employees who had responded to the first two surveys, asking for their participation in the final survey. Of the 53 employees who took the first survey, 51 responded to the third survey. Two employees who had responded to the second survey no longer were employed by TRW at the time the third survey was distributed.

Challenges to Data Collection

Before the data could be analyzed, data had to be collected. In this case, data collection proved to be a major challenge. Collecting data during a period of post-acquisition integration boils down to a matter of establishing a trust relationship between the researcher, the host organization’s sponsoring leadership and the employees who ultimately agree to participate in the survey. The following is a review of the major data collection issues.

The nature of the data that were collected may have had a contributory effect on the low response rate (30%). Feedback from legacy TRW HR leadership shared the belief of several employees and their managers that the questions asked in the survey were “too personal” and “invasive.” This was particularly true for the questions contained in the PFI. After the first survey was administered, several employees who responded to the survey provided anonymous feedback indicating that answering the survey made them feel uncomfortable.

Data collection efforts suffered from the fact that the data collector was external to the organization. During the collection of data for the first survey, employees initially stated to their managers and HR that they did not know who was collecting the data, and therefore would not respond to the survey. These statements were made even though TRW operating leadership had briefed employees of TRW’s GITD division that some would be randomly selected to participate
in the survey. Other than providing e-mail addressees, no organizational support was provided to support the collection of data, which also contributed to a low response rate. TRW leadership had determined that no support would be given to the collection of data in order to ensure that employees would not perceive the employee surveys to be an assessment or an evaluative tool for the purposes of selection or retention.

Even with the lack of organizational endorsement, and the promise of anonymity, some employees held the belief that the survey was an assessment tool. Several employees sent anonymous e-mails to me stating that they were afraid to respond to the survey for fear that their responses would be shared with the new management team. Others felt they could not be honest, as they did not believe the survey was truly anonymous.

Turnover was a concern, as the respondent pool slowly shrunk from 58, to 53, and finally to 51 respondents. A second minor concern was the timing of the survey. The surveys were sent out on or about December 11, January 11 and February 11. The overlap of holidays and end-of-year project management deadlines, combined with the stress of the acquisition, also contributed to a lower than expected response rate. Initial response to surveys from T₂ to T₃ was light. A reminder e-mail was sent to non-respondents three days after the first e-mail. A subsequent wave analysis showed no significant difference in the commitment scales mean scores between the first and second wave respondents at either T₂ or T₃.

Changes to the Survey

The first survey required the respondents to answer specific demographic questions relating to (a) occupational status, (b) organizational tenure (years of TRW service), and (c) years in the work force (Appendix A). These three questions were eliminated in the second and third surveys, as they were perceived by the legacy TRW HR leadership to be redundant. Demographic data were derived for T₁ and T₂ respondents by matching survey ID numbers to T₁ demographic data.

During the review of the survey with TRW’s legacy HR leadership, the leadership felt that it was important to modify questions that identified the company over the course of the survey to correspond with the transition to the new organization’s corporate brand. The legacy TRW HR department felt that in the first survey, “TRW” should be used to identify the organization. In the second survey, the term “TRW/ Northrop Grumman” should be used, and in the third survey, only “Northrop Grumman” should be used to identify the company. This was agreed to, and the appropriate survey questions were modified (See Appendix F).

Analysis

Demographic Variables

The first survey completed by the respondents at the time of the change of control (T₁) collected certain demographic variables titled: (a) occupational status, (b) organizational tenure (years of TRW service or company service), and (c) years in the work force.

Occupational Status

Occupational status refers to the job level of the respondent, and is categorical. Table 2 reflects the survey sample’s occupational status demographics.
Table 2

*Occupational Status at T₁, T₂, and T₃*

<table>
<thead>
<tr>
<th>Time</th>
<th>Occupational Category</th>
<th>Number of Employees</th>
<th>Percent of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₁</td>
<td>Executives</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>18</td>
<td>31%</td>
</tr>
<tr>
<td></td>
<td>Exempt Non-Managers</td>
<td>31</td>
<td>53%</td>
</tr>
<tr>
<td></td>
<td>Non- Exempt</td>
<td>8</td>
<td>14%</td>
</tr>
<tr>
<td>T₂</td>
<td>Executives</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>16</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>Exempt Non-Managers</td>
<td>28</td>
<td>53%</td>
</tr>
<tr>
<td></td>
<td>Non- Exempt</td>
<td>8</td>
<td>15%</td>
</tr>
<tr>
<td>T₃</td>
<td>Executives</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>15</td>
<td>29%</td>
</tr>
<tr>
<td></td>
<td>Exempt Non-Managers</td>
<td>28</td>
<td>54%</td>
</tr>
<tr>
<td></td>
<td>Non- Exempt</td>
<td>7</td>
<td>13%</td>
</tr>
</tbody>
</table>

Even given the slight attrition of respondents over time, the percent of sample remains fairly constant over the three time periods. As a comparison, Table 3 reflects actual occupational status demographics for the TRW GITD population of employees (averaged from T₁ to T₃).

Table 3

*Occupational Status for TRW GITD Employees*

<table>
<thead>
<tr>
<th>Occupational Category</th>
<th>Percent of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executives</td>
<td>2%</td>
</tr>
<tr>
<td>Managers</td>
<td>10%</td>
</tr>
<tr>
<td>Exempt Non-Managers</td>
<td>76%</td>
</tr>
<tr>
<td>Non- Exempt</td>
<td>12%</td>
</tr>
</tbody>
</table>

Even though there was limited attrition, the difference in the percentage of Manager and Exempt Non-Managers completing the survey, as compared to the actual population, leads to the belief that there may be serious response bias issues. According to Paulhus (1991): “Response bias is a systematic tendency to respond to a range of questionnaire items on some basis other than… what the item was designed to measure (p. 17).” When using self-report measures, it is important to consider response bias. The most common forms of response bias are social desirability, acquiescence and extreme responding (Paulhus, 1991). In this sample, socially desirable responding, which is “…the tendency to give answers that make the respondent look good” (Paulus, 1991, p. 17) is the form that needs to be addressed. According to Bardwell and Dimsdale (Bardwell & Dimsdale, 2001):
The impact of this form of response bias can be reduced beforehand through the use of various test construction techniques, and it can be reduced during the administration of a self-report instrument by minimizing environmental demand characteristics. In addition, it can be controlled for afterwards by administering a separate instrument that measure socially desirable responding and using that instrument’s scores as a covariate in analysis that uses self-report measures (p. 28).

In this case, the context of the post-acquisition operating environment made it impossible to minimize environmental demand characteristics. Alternatively, a post-survey administration of another social desirability scale could not be negotiated with the host organization. The reader, therefore, needs to be cautioned of the severe possibility of response bias in the survey results.

**Years in the Workforce and Organizational Tenure**

Initially, the two demographic variables measuring years in the workforce and organizational tenure were assumed to be closely linked. However, correlation analysis of the two variables at T₁, T₂ and T₃ reflects fairly low correlations. Table 4 provides a summary examination of each variable’s descriptive characteristics. In addition to this table, a graphical representation of a frequency histogram for these two demographic variables is provided at Appendix G, which gives a visual insight into this low correlation.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Statistics</th>
<th>T₁</th>
<th>T₂</th>
<th>T₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>N cases</td>
<td></td>
<td>58</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>Years in Workforce</td>
<td>Mean</td>
<td>15.2</td>
<td>15.1</td>
<td>15.5</td>
</tr>
<tr>
<td></td>
<td>Std. Dev.</td>
<td>11.7</td>
<td>11.7</td>
<td>11.69</td>
</tr>
<tr>
<td>Years of TRW Service</td>
<td>Mean</td>
<td>7.4</td>
<td>7.7</td>
<td>7.9</td>
</tr>
<tr>
<td></td>
<td>Std. Dev.</td>
<td>7.24</td>
<td>7.49</td>
<td>7.57</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td></td>
<td>.532*</td>
<td>.582*</td>
<td>.573*</td>
</tr>
</tbody>
</table>

* p<.01 level (2-tailed).

The low correlation between the two variables was discussed with the HR leadership of TRW, who suggested two possible explanations for the data. The first was the fact that the particular employee sample used for the data collection was comprised of primarily information technology (IT) professionals. According to the HR leadership, IT employees within this particular division of TRW have traditionally been the most transient of their employee base. A second related explanation was the fact that the division from where the employee sample was drawn is primarily a project or contract-based work environment. IT employees are hired to work on specific projects or contracts of a fixed length, and once the project or contract is completed, the employee is either reassigned within TRW or involuntarily terminated.
It would seem from the information provided by legacy TRW HR leadership that a certain type of employee is attracted to the work offered by this particular division of TRW. What attributes this type of employee demonstrates can be ascertained from an understanding of the dispositional attributes of positive affect and adaptive coping.

### Dispositional and Commitment Scales

**Positive Affect**
Positive affect (PA) has shown to be a dispositional personality attribute in contexts other than periods of organizational change (David Watson & Lee Anna Clark, 1994). Appendix H lists the histograms and frequencies for PA at T₁, T₂, and T₃. Table 5 summarizes the descriptive and reliability statistics for this attribute at T₁, T₂, and T₃:

<table>
<thead>
<tr>
<th>Statistics</th>
<th>T₁</th>
<th>T₂</th>
<th>T₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>N cases</td>
<td>58</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>Mean</td>
<td>3.26</td>
<td>3.28</td>
<td>3.27</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>.94</td>
<td>.98</td>
<td>.96</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>.94</td>
<td>.95</td>
<td>.94</td>
</tr>
</tbody>
</table>

For this particular employee sample, the dispositional attribute of positive affect was determined to be internally consistent, and reliable for the time period encompassed by the three surveys.

**Adaptive Coping**
The adaptive coping (ADC) trait had also been posited to be an enduring personality characteristic (Kohn, Wood, Pickering et al., 2002). Appendix I provides the histograms for ADC at T₁, T₂, and T₃. Table 6 summarizes the descriptive and reliability statistics for this trait at T₁, T₂, and T₃:

<table>
<thead>
<tr>
<th>Statistics</th>
<th>T₁</th>
<th>T₂</th>
<th>T₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>N cases</td>
<td>58</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>Mean</td>
<td>3.75</td>
<td>3.75</td>
<td>3.2</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>.35</td>
<td>.35</td>
<td>.62</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>.85</td>
<td>.79</td>
<td>.92</td>
</tr>
</tbody>
</table>

For this particular employee sample, the dispositional attribute of adaptive coping was determined to be internally consistent, but not reliable for the time period encompassed by the three surveys. A review of the adaptive coping correlation statistics at Table 7 endorses the
belief, that in this sample, the trait does not provide a consistent correlation from \( T_1 \), to \( T_3 \). In fact, there is a significant shift to a bimodal distribution for this trait at \( T_3 \).

Table 7

Adaptive Coping Descriptive & Reliability Statistics at \( T_1 \), \( T_2 \) and \( T_3 \)

<table>
<thead>
<tr>
<th>Pearson Correlation</th>
<th>( T_1 )</th>
<th>( T_2 )</th>
<th>( T_3 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( T_2 )</td>
<td>.781**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( T_3 )</td>
<td></td>
<td>.224</td>
<td>.263</td>
</tr>
</tbody>
</table>

** \( p < .01 \) level (2-tailed).

To confirm these statistics, the raw data were re-reviewed, re-coded and re-analyzed, with the same results. At \( T_3 \), adaptive coping shifts from a normal distribution to a bimodal distribution of responses (see Appendix I).

To further explore what was happening at \( T_3 \), a hierarchical regression was completed to explore the relationships between the EPAS, PA, and in this case, the negative affect (NA) scale, with ADC as the dependent variable. The reason these three variables were chosen was due to the relationships established in the full-model correlation at \( T_3 \). Since the adaptive coping scores at \( T_3 \) are bimodal, a transformation of the scores was computed using \( 1/x \).

From the correlation table, the data describe a stronger relationship between EPAS and ADC than at \( T_1 \) or \( T_2 \). Employee perceptions of acquisition success and PA have also shown to have a significant, albeit inconsistent, relationship across all three time periods, leading to the speculation that they may be related, as both scales measure positive, or success characteristics. Negative affect was not originally included in the research design, but was included as part of the PANAS instrument in order to provide a balance of positive and negative emotion scoring opportunities for the respondents. The results of this hierarchical regression are provided in Table 8, with the hierarchical regression coefficients listed in Table 9.

Table 8

Adaptive Coping Hierarchical Regression at \( T_3 \) (EPAS, PA, NA)

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
</table>
a     | .281    | .05890                    | .281            | 19.158   | .000          |
b     | .289    | .05916                    | .008            | .563     | .457          |
c     | .353    | .05706                    | .063            | 4.607    | .037          |

Note. a Predictors: (Constant), EPAS_Mod,
       b Predictors: (Constant), EPAS_Mod, Positive Affect
       c Predictors: (Constant), EPAS_Mod, Positive Affect, Negative Affect
Table 9

Adaptive Coping Hierarchical Regression Coefficients at T₃ (EPAS, PA, NA)

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPAS_MOD</td>
<td>-.530</td>
<td>-4.377</td>
<td>.000</td>
</tr>
<tr>
<td>EPAS_MOD</td>
<td>-.502</td>
<td>-3.945</td>
<td>.000</td>
</tr>
<tr>
<td>POS_AFF</td>
<td>-.095</td>
<td>-.750</td>
<td>.457</td>
</tr>
<tr>
<td>EPAS_MOD</td>
<td>-.549</td>
<td>-4.402</td>
<td>.000</td>
</tr>
<tr>
<td>POS_AFF</td>
<td>-.234</td>
<td>-1.689</td>
<td>.098</td>
</tr>
<tr>
<td>NEG_AFF</td>
<td>-.298</td>
<td>-2.146</td>
<td>.037</td>
</tr>
</tbody>
</table>

Note. Dependent Variable= ADC_1C

The negative Beta values for the three independent variables are a result of the 1/x transformation of the adaptive coping score. At T₃, negative affect has a significant contribution to the full model, and positive affect is very close to having a significant influence on affective coping. However, neither is significant without the other in this model. This means that, at least, positive and negative affect share much of the common variance. This sharing of variance is consistent with the literature which states PA and NA are slightly orthogonal (David Watson & Lee Anna Clark, 1994). As this was an exploratory process, the entry of the affect scales was reversed, with the results listed in Table 10 and Table 11:

Table 10

Adaptive Coping Hierarchical Regression at T₃ (EPAS, NA & PA)

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>.281</td>
<td>.05890</td>
<td>.281</td>
<td>19.158</td>
<td>.000</td>
</tr>
<tr>
<td>b</td>
<td>.314</td>
<td>.05815</td>
<td>.032</td>
<td>2.271</td>
<td>.138</td>
</tr>
<tr>
<td>c</td>
<td>.353</td>
<td>.05706</td>
<td>.039</td>
<td>2.854</td>
<td>.098</td>
</tr>
</tbody>
</table>

Note. a Predictors: (Constant), EPAS_Mod

b Predictors: (Constant), EPAS_Mod, Negative Affect

c Predictors: (Constant), EPAS_Mod, Negative Affect, Positive Affect
Table 11

Adaptive Coping Hierarchical Regression Coefficients at T₃ (EPAS, NA & PA).

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12.719</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>EPAS_Mod</td>
<td>-.530</td>
<td>-4.377</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>10.537</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>EPAS_Mod</td>
<td>-.585</td>
<td>-4.680</td>
<td>.000</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>-.188</td>
<td>-1.507</td>
<td>.138</td>
</tr>
<tr>
<td></td>
<td>9.604</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>EPAS_Mod</td>
<td>-.549</td>
<td>-4.402</td>
<td>.000</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>-.298</td>
<td>-2.146</td>
<td>.037</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>-.234</td>
<td>-1.689</td>
<td>.098</td>
</tr>
</tbody>
</table>

Note. Dependent Variable: ADC_1C

Similar regressions were explored at T₁ and T₂. For T₁ and T₂ the coefficients of determination were so low (T₁ R² = .074, T₂ R² = .053) that the analysis proved to have no additive value to the understanding of the changing relationships among the variables at T₃.

At T₃, the adaptive coping scale reflects a bimodal distribution. Therefore, another exploratory regression analysis was completed to determine how EPAS, positive and negative affect predicted the adaptive coping scores when the adaptive coping data were split at the mean. The data were split at the mean to determine the influence of the EPAS, PA and NA separately on adaptive coping that were above and below the mean. Table 12 is a summary of the regressions. Table 13 lists the regression statistics when the affect scales are entered in reverse (NA, then PA).

The model has a slightly stronger (yet not statistically significant) predictive value for adaptive coping scores below the mean. This is interesting, given the fact that below-mean scores reflect a slightly stronger maladaptive orientation of the respondents at T₃. Positive affect also contributes a stronger influence than negative affect to below-mean adaptive coping scores, while neither affect scale has a significant influence on the above-mean scores. Given the small sample, this does not provide enough information on which to base further evaluation in this case.
The literature suggests that prolonged stressful situations may have an adverse impact on an individual’s adaptive coping capabilities (Folkman & Moskowski, 2000). According to Folkman and Mokowski (2000): “Intense, prolonged negative affect, such as that experienced in chronically stressful conditions, without the compensatory experiences of positive affect may overwhelm the regulatory function of emotion…” (p. 639).

The slight increase in the influence of negative affect on adaptive coping in both models at T₃ bears some witness to this theory. Given that the sixty day period of time immediately after an acquisition is considered to be the most stressful (Cartwright & Cooper, 1996; Pritchett et al.,

### Table 12

**Hierarchical Regression of Adaptive Coping Split at the Mean at T₃ (EPAS_Mod, PA & NA)**

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Beta</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Above Mean</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.012</td>
<td>-.112</td>
<td>.23288</td>
<td>.012</td>
<td>.315</td>
<td>.579</td>
</tr>
<tr>
<td>2</td>
<td>.012</td>
<td>-.059</td>
<td>.23724</td>
<td>.001</td>
<td>.017</td>
<td>.896</td>
</tr>
<tr>
<td>3</td>
<td>.014</td>
<td>-.059</td>
<td>.24168</td>
<td>.002</td>
<td>.053</td>
<td>.819</td>
</tr>
<tr>
<td><strong>Below Mean</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.041</td>
<td>.236</td>
<td>.28724</td>
<td>.041</td>
<td>.852</td>
<td>.367</td>
</tr>
<tr>
<td>2</td>
<td>.114</td>
<td>.417</td>
<td>.28325</td>
<td>.073</td>
<td>1.568</td>
<td>.226</td>
</tr>
<tr>
<td>3</td>
<td>.208</td>
<td>.361</td>
<td>.27520</td>
<td>.094</td>
<td>2.127</td>
<td>.162</td>
</tr>
</tbody>
</table>

Note.  
- a Predictors: (Constant), EPAS_Mod  
- b Predictors: (Constant), EPAS_Mod, Positive Affect  
- c Predictors: (Constant), EPAS_Mod, Positive Affect, Negative Affect

### Table 13

**Hierarchical Regression of Adaptive Coping Split at the Mean at T₃ (EPAS_Mod, NA & PA)**

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Beta</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Above Mean</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.012</td>
<td>-.112</td>
<td>.23288</td>
<td>.012</td>
<td>.315</td>
<td>.579</td>
</tr>
<tr>
<td>2</td>
<td>.012</td>
<td>-.059</td>
<td>.23724</td>
<td>.001</td>
<td>.014</td>
<td>.908</td>
</tr>
<tr>
<td>3</td>
<td>.014</td>
<td>-.059</td>
<td>.24168</td>
<td>.002</td>
<td>.057</td>
<td>.813</td>
</tr>
<tr>
<td><strong>Below Mean</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.041</td>
<td>.236</td>
<td>.28724</td>
<td>.041</td>
<td>.852</td>
<td>.367</td>
</tr>
<tr>
<td>2</td>
<td>.070</td>
<td>.361</td>
<td>.29012</td>
<td>.030</td>
<td>.604</td>
<td>.447</td>
</tr>
<tr>
<td>3</td>
<td>.208</td>
<td>.417</td>
<td>.27520</td>
<td>.137</td>
<td>3.116</td>
<td>.094</td>
</tr>
</tbody>
</table>

Note.  
- a Predictors: (Constant), EPAS_Mod  
- b Predictors: (Constant), EPAS_Mod, Negative Affect  
- c Predictors: (Constant), EPAS_Mod, Negative Affect, Positive Affect
1997; Schein, 2000; Troiano, 1999), it would seem probable that the changes in the responses to the PFI would reflect the respondent’s riposte to a prolonged period of stress.

**Positive Affect and Adaptive Coping**

A review of the literature suggested that there may be a relationship between positive affect and adaptive coping (Folkman & Moskowski, 2000). The influence of positive affect and negative affect on adaptive coping was explored through regression analysis, with the results listed in Tables 14. The modified EPAS scale was also included as an independent variable to provide consistency in examining the influence of the full model on adaptive coping. Note that only T1 and T2 data were explored, given that the relationships among the PA, NA and adaptive coping scales at T3 were already explored in the previous section. Table 15 reflects the correlations across time for PA, NA and ADC.

Table 14

<table>
<thead>
<tr>
<th></th>
<th>Positive &amp; Negative Affect Regressed on Adaptive Coping at T1 and T2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R Square</td>
</tr>
<tr>
<td>T1 (a)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.040</td>
</tr>
<tr>
<td>(b)</td>
<td>.074</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>T2 (a)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.002</td>
</tr>
<tr>
<td>(b)</td>
<td>.016</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), POS_AFF
b Predictors: (Constant), POS_AFF, NEG_AFF

Table 15

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Correlation Statistic</th>
<th>T1 to T2</th>
<th>T2 to T3</th>
<th>T1 to T3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Affect</td>
<td>Pearson Correlation</td>
<td>.838**</td>
<td>.918**</td>
<td>.877**</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>Pearson Correlation</td>
<td>.562**</td>
<td>.764**</td>
<td>.511**</td>
</tr>
<tr>
<td>Adaptive Coping</td>
<td>Pearson Correlation</td>
<td>.781**</td>
<td>.263</td>
<td>.224</td>
</tr>
</tbody>
</table>

** p< .01.

It is apparent from the data that for this sample, positive affect and negative affect have no significant predictive value for adaptive coping at T1 and T2.
**Employee Perception of Acquisition Success**

The employee perception of acquisition success (EPAS) scale was developed to measure the employees’ perception of the success of the acquisition. The EPAS scale was constructed of questions which measured an employee’s perception of: (a) the level of communications received concerning the acquisition, (b) personal career development, and (c) the financial success of the acquisition. Table 16 summarizes the descriptive and reliability statistics for this perception scale at T₁, T₂, and T₃:

Table 16

<table>
<thead>
<tr>
<th>EPAS Descriptive &amp; Reliability Statistics at T₁, T₂ and T₃</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statistics</strong></td>
</tr>
<tr>
<td>N cases</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Std. Dev.</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
</tr>
</tbody>
</table>

The EPAS alpha values at T₁, T₂, and T₃ reflect relatively low internal reliability, and a reliability analysis was completed to determine which questions could be eliminated in order to gain a higher Cronbach’s alpha. The result of this reliability analysis is summarized in Tables 17 through 19.

Table 17

<table>
<thead>
<tr>
<th>Reliability Analysis of the EPAS at T₁</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question Number</strong></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
</table>
Table 18

Reliability Analysis of the EPAS at $T_2$

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Squared Multiple Correlation</th>
<th>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>27.6415</td>
<td>20.3498</td>
<td>.4437</td>
<td>.3969</td>
<td>.7990</td>
</tr>
<tr>
<td>2</td>
<td>27.4151</td>
<td>20.6705</td>
<td>.6213</td>
<td>.4945</td>
<td>.7816</td>
</tr>
<tr>
<td>3</td>
<td>27.6604</td>
<td>19.6517</td>
<td>.5526</td>
<td>.5140</td>
<td>.7846</td>
</tr>
<tr>
<td>4</td>
<td>27.9057</td>
<td>21.0102</td>
<td>.3298</td>
<td>.4288</td>
<td>.8152</td>
</tr>
<tr>
<td>5</td>
<td>27.7925</td>
<td>19.8984</td>
<td>.5433</td>
<td>.3777</td>
<td>.7860</td>
</tr>
<tr>
<td>6</td>
<td>27.7736</td>
<td>18.7939</td>
<td>.7009</td>
<td>.6006</td>
<td>.7653</td>
</tr>
<tr>
<td>7</td>
<td>27.4906</td>
<td>20.6778</td>
<td>.5177</td>
<td>.5051</td>
<td>.7900</td>
</tr>
<tr>
<td>8</td>
<td>27.9434</td>
<td>20.4775</td>
<td>.4902</td>
<td>.3991</td>
<td>.7927</td>
</tr>
<tr>
<td>9</td>
<td>27.7358</td>
<td>20.1212</td>
<td>.433</td>
<td>.2884</td>
<td>.8015</td>
</tr>
</tbody>
</table>

Table 19

Reliability Analysis of the EPAS at $T_3$

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Squared Multiple Correlation</th>
<th>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25.3137</td>
<td>28.8596</td>
<td>.5073</td>
<td>.4822</td>
<td>.8093</td>
</tr>
<tr>
<td>2</td>
<td>25.3333</td>
<td>27.3467</td>
<td>.6694</td>
<td>.6153</td>
<td>.7903</td>
</tr>
<tr>
<td>3</td>
<td>25.3725</td>
<td>28.0784</td>
<td>.5591</td>
<td>.4464</td>
<td>.8032</td>
</tr>
<tr>
<td>4</td>
<td>25.3529</td>
<td>31.4329</td>
<td>.2410</td>
<td>.2949</td>
<td>.8400</td>
</tr>
<tr>
<td>5</td>
<td>25.2549</td>
<td>29.0337</td>
<td>.5050</td>
<td>.4835</td>
<td>.8095</td>
</tr>
<tr>
<td>6</td>
<td>25.3137</td>
<td>27.4996</td>
<td>.6476</td>
<td>.6779</td>
<td>.7928</td>
</tr>
<tr>
<td>7</td>
<td>25.2549</td>
<td>26.6737</td>
<td>.6726</td>
<td>.6647</td>
<td>.7886</td>
</tr>
<tr>
<td>8</td>
<td>25.3725</td>
<td>29.3184</td>
<td>.5191</td>
<td>.4487</td>
<td>.8082</td>
</tr>
<tr>
<td>9</td>
<td>25.3529</td>
<td>29.1129</td>
<td>.4535</td>
<td>.3494</td>
<td>.8158</td>
</tr>
</tbody>
</table>

By removing question #4, (“I am comfortable with the level of communication from my supervisors and managers regarding the progress of the acquisition.”) EPAS reliability increases slightly at $T_1$, $T_2$ and $T_3$. For the purpose of understanding the influence of employee perception of acquisition success on the three commitment scales, a modified EPAS scale (EPAS_Mod) that does not include question #4 data was used. Table 20 summarizes the descriptive and reliability statistics for the EPAS_Mod scale at $T_1$, $T_2$, and $T_3$. 
Table 20

*EPAS Mod Descriptive & Reliability Statistics at T₁, T₂ and T₃*

<table>
<thead>
<tr>
<th>Statistics</th>
<th>T₁</th>
<th>T₂</th>
<th>T₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>N cases</td>
<td>58</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>Mean</td>
<td>3.35</td>
<td>3.49</td>
<td>3.17</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>.51</td>
<td>.57</td>
<td>.7</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>.79</td>
<td>.82</td>
<td>.84</td>
</tr>
</tbody>
</table>

Appendix J lists the histograms for EPAS and EPAS Mod at T₁, T₂, and T₃. EPAS correlation/covariance matrices were also computed at T₁, T₂, and T₃. These matrices are provided at Appendix K. An exploratory factor analysis was also computed in addition to a reliability analysis. This factor analysis is provided at Appendix L. The factor analysis at T₁ highlights the fact that the EPAS loads on three factors. These three factors are 1= acquisition success, 2= communications, and 3= individual career success. When question four is removed, the EPAS_mod loads only on two factors. Subsequently, the factor analysis at T₂ and T₃ for the EPAS scale reflects only two factors, with a different mix of questions loading on each factor at each time. At T₂ the EPAS_mod factor analysis is unable to transform one set of loadings to another due to only one factor. And at T₃, EPAS_mod continues to load on only two factors. Overall, these multi-factorial solutions are not clean or clear. This changing pattern in the factor loadings has substantial significance. And while this significance is acknowledged, the level of qualitative inquiry necessary to explore these changing interactions is beyond the scope of this dissertation.

**Commitment Scales**

The three scales of affective, normative and continuance commitment were separately measured at T₁, T₂ and T₃. The following is a summary of the data for each of the three commitment scales.

**Affective Commitment**

A frequency histogram reflecting the distribution of scores for the affective commitment scale at T₁, T₂, and T₃ is provided at Appendix M. Table 21 summarizes the descriptive and reliability statistics for this scale at T₁, T₂, and T₃.

Table 21

*Affective Commitment Descriptive & Reliability Statistics at T₁, T₂ and T₃*

<table>
<thead>
<tr>
<th>Statistics</th>
<th>T₁</th>
<th>T₂</th>
<th>T₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>N cases</td>
<td>58</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>Mean</td>
<td>4.69</td>
<td>4.57</td>
<td>4.41</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.21</td>
<td>1.29</td>
<td>1.18</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>.85</td>
<td>.89</td>
<td>.88</td>
</tr>
</tbody>
</table>
Normative Commitment

A frequency histogram reflecting the distribution of scores for the normative commitment scale at T₁, T₂, and T₃ is provided at Appendix N. Table 22 summarizes the descriptive and reliability statistics for this scale at T₁, T₂ and T₃.

Table 22

Normative Commitment Descriptive & Reliability Statistics at T₁, T₂ and T₃

<table>
<thead>
<tr>
<th>Statistics</th>
<th>T₁</th>
<th>T₂</th>
<th>T₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>N cases</td>
<td>58</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>Mean</td>
<td>4.69</td>
<td>4.57</td>
<td>4.15</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.21</td>
<td>1.29</td>
<td>1.21</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>.85</td>
<td>.89</td>
<td>.85</td>
</tr>
</tbody>
</table>

Continuance Commitment

A frequency histogram reflecting the distribution of scores for the continuance commitment scale at T₁, T₂, and T₃ is provided at Appendix O. Table 23 summarizes the descriptive and reliability statistics for this scale at T₁, T₂, and T₃.

Table 23

Continuance Commitment Descriptive & Reliability Statistics at T₁, T₂ and T₃

<table>
<thead>
<tr>
<th>Statistics</th>
<th>T₁</th>
<th>T₂</th>
<th>T₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>N cases</td>
<td>53</td>
<td>58</td>
<td>51</td>
</tr>
<tr>
<td>Mean</td>
<td>4.1</td>
<td>3.97</td>
<td>3.90</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.11</td>
<td>1.33</td>
<td>1.15</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>.80</td>
<td>.87</td>
<td>.80</td>
</tr>
</tbody>
</table>

The three commitment scales were also correlated. Table 24 is a summary of the correlation statistics for the three components of the commitment model.

Table 24

Correlations for Adaptive, Continuance and Normative Commitment Scales Over Time

<table>
<thead>
<tr>
<th>Scale</th>
<th>T₁ Continuance</th>
<th>T₁ Normative</th>
<th>T₂ Continuance</th>
<th>T₂ Normative</th>
<th>T₃ Continuance</th>
<th>T₃ Normative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective</td>
<td>.299*</td>
<td>.586**</td>
<td>.241</td>
<td>.547**</td>
<td>.248</td>
<td>.526**</td>
</tr>
<tr>
<td>Continuance</td>
<td>.240</td>
<td>.316*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05. ** p < .01.
The aforementioned data and the summary statistics provided at Appendices H through V will be used to answer the four research questions reviewed in Chapter Three.

**Answering the Research Questions**

**Research Question #1**

What pattern of scores on the commitment scales over three time periods are exhibited by a group of employees involved in a merger of two companies?

To answer this question, two types of data analyses were completed. The first type of analysis was repeated measures design. This data analysis was completed to determine if the change in the mean scores for each commitment scale was significant over time. The second type of analysis was a hierarchical regression analysis among the three commitment scales at T1, T2 and T3. Hierarchical regression analysis was used to determine the unique influence of each commitment scale on the corresponding two scales at each time period.

**Repeated Measures Design**

Note that for the repeated measures design, seven cases were deleted from the analysis due to five employee terminations at T2, and two terminations at T3 that prohibited the use of a case- wise comparison for the original 58 cases from T1. To determine if the mean score changes are statistically significant, two key values will be examined. The first is the F statistic and the related significance level; the second is the partial Eta squared. Table 25 is the scale provided for supporting the evaluation of the partial Eta squared (Weinberg & Abramowitz, 2002) following the partial Eta squared size conventions set forth by Cohen (J. Cohen & Cohen, 1983).

Table 25

<table>
<thead>
<tr>
<th>Partial Eta squared</th>
<th>.01 represents a “small’ effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.09 represents a “medium” effect</td>
</tr>
<tr>
<td></td>
<td>.25 represents a “large” effect</td>
</tr>
</tbody>
</table>

For affective commitment, the mean scores decrease over time, from 4.69 at T1, to 4.41 at T3. To determine if this is a significant decrease, a repeated measures design was computed. Table 26 illustrates the results. For affective commitment, the data reflect that the decrease in mean scores is not statistically significant from T1 to T2, or from T2 to T3. The decrease in the mean is only significant from T1 to T3, at the .05 level, with a partial Eta square reflecting a “medium” level of effect. This is not conclusive enough to support the overall statistical significance of the decrease in mean scores.
Table 26

Tests of Within-Subjects Contrasts for Affective Commitment at T1, T2 and T3

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncent. Parameter</th>
<th>Observed Power(a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective Commitment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1 vs. T2</td>
<td>1.595</td>
<td>1.595</td>
<td>2.45</td>
<td>.124</td>
<td>.047</td>
<td>2.451</td>
<td>.336</td>
</tr>
<tr>
<td>T2 vs. T3</td>
<td>.423</td>
<td>.423</td>
<td>1.81</td>
<td>.184</td>
<td>.035</td>
<td>1.817</td>
<td>.262</td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1 vs. T2</td>
<td>32.537</td>
<td>.651</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2 vs. T3</td>
<td>11.649</td>
<td>.233</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective Commitment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1 vs. T3</td>
<td>3.662</td>
<td>3.662</td>
<td>7.46</td>
<td>.009</td>
<td>.130</td>
<td>7.460</td>
<td>.764</td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1 vs. T3</td>
<td>24.547</td>
<td>.491</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Computed using alpha = .05

Normative commitment shares the same fate as affective commitment when determining the significance of the decrease in mean scores. Table 27 illustrates the results of the repeated measures design for normative commitment. The partial Eta squared values of .027 and .006 reflect a small effect for this scale T1 to T2, T2 to T3, and from T1 to T3.

Table 27

Tests of Within-Subjects Contrasts for Normative Commitment at T1, T2 and T3

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncent. Parameter</th>
<th>Observed Power(a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normative Commitment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1 vs. T2</td>
<td>.821</td>
<td>.821</td>
<td>1.39</td>
<td>.243</td>
<td>.027</td>
<td>1.399</td>
<td>.213</td>
</tr>
<tr>
<td>T2 vs. T3</td>
<td>.051</td>
<td>.051</td>
<td>.305</td>
<td>.583</td>
<td>.006</td>
<td>.305</td>
<td>.084</td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1 vs. T2</td>
<td>29.338</td>
<td>.587</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2 vs. T3</td>
<td>8.399</td>
<td>.168</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normative Commitment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1 vs. T3</td>
<td>.462</td>
<td>.462</td>
<td>.822</td>
<td>.369</td>
<td>.016</td>
<td>.822</td>
<td>.144</td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1 vs. T3</td>
<td>28.106</td>
<td>.562</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Computed using alpha = .05

The repeated measures design statistics for the continuance commitment scale is shown in Table 28. The decrease in mean scores for continuance commitment is not statistically
significant across any of the three time periods. Partial Eta squared values reflect a small effect for this commitment scale.

Table 28

| Tests of Within-Subjects Contrasts for Continuance Commitment at T1, T2 and T3. |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Source                          | Type III        | Sum of Squares  | Mean Square     | F               | Sig.            | Partial Eta Squared | Noncent. Parameter | Observed Power(a) |
| Continuance Commitment          | T1 vs. T2       | 1.091           | 1.091           | .857            | .359            | .017              | .857              | .148              |
|                                | T2 vs. T3       | .000            | .000            | .001            | .979            | .000              | .001              | .050              |
| Error                           | T1 vs. T2       | 63.700          | 1.274           |                 |                 |                   |                   |                   |
|                                | T2 vs. T3       | 22.284          | .446            |                 |                 |                   |                   |                   |
| Continuance Commitment          | T1 vs. T3       | 1.129           | 1.129           | 1.347           | .253            | .026              | 1.343             | .206              |
| Error                           | T1 vs. T3       | 42.033          | .841            |                 |                 |                   |                   |                   |

Note. Computed using alpha = .05

Hierarchical Regression

Since this was an exploratory process to determine a pattern of scores on the commitment scales over three time periods, hierarchical regressions were completed on each commitment scale’s relationship to the other two scales at each time period. Second, regressions were completed for each scale separately, requiring the regression of each scale at T1 to T2, T2 to T3, and T1 to T3. Appendix Q provides a summary of the hierarchical regressions, and Appendix T summarizes both the linear and hierarchical regressions for each commitment scale from T1 to T3. Through an examination of the data presented in Appendices Q and R, I believe there are several distinct patterns of scores. These patterns are discussed in the following section.

T1

The exploration of the data will begin with affective commitment (AC). Normative commitment (NC) has been shown in the literature to have a stronger predictive value for affective commitment in other contexts (Morrow, 1993). In addition, a related study on post-acquisition commitment also proved NC to have a greater predictive value for AC than CC (Ozag, 2001). Table 29 reflects the hierarchical regression for this commitment scale at T1.
Table 29

*Affective Commitment Regressed on NC & CC at T₁*

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>Beta</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>.437</td>
<td>.661*</td>
<td>.91555</td>
<td>.437</td>
<td>43.446</td>
<td>.000</td>
</tr>
<tr>
<td>b</td>
<td>.458</td>
<td>.609*</td>
<td>.90595</td>
<td>.022</td>
<td>2.193</td>
<td>.144</td>
</tr>
</tbody>
</table>

Note.  

a.  Predictors: (Constant), Normative Commitment  
b.  Predictors: (Constant), Normative, Continuance Commitment  

*p<.01.

For NC, AC also proves to have a greater predictive value than CC. Table 30 reflects the hierarchical regression of AC and CC on NC at T₁, and shows NC to have a stronger Beta value for AC than CC.

Table 30

*Normative Commitment Regressed on AC & CC at T₁*

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>Beta</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>.437</td>
<td>.661*</td>
<td>.90020</td>
<td>.437</td>
<td>43.446</td>
<td>.000</td>
</tr>
<tr>
<td>b</td>
<td>.447</td>
<td>.662*</td>
<td>.89983</td>
<td>.010</td>
<td>1.045</td>
<td>.311</td>
</tr>
</tbody>
</table>

Note.  

a.  Predictors: (Constant), Affective Commitment  
b.  Predictors: (Constant), Affective, Continuance Commitment  

*p<.01.

Continuance commitment at T₁ has the weakest relationship to both AC and NC. This conclusion is supported through a review of the hierarchical regression statistics at Table 31.

Table 31

*Continuance Commitment Regressed on AC & NC at T₁*

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>Beta</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>.128</td>
<td>.358*</td>
<td>1.04900</td>
<td>.128</td>
<td>8.251</td>
<td>.006</td>
</tr>
<tr>
<td>b</td>
<td>.145</td>
<td>.246</td>
<td>1.04858</td>
<td>.016</td>
<td>1.045</td>
<td>.311</td>
</tr>
</tbody>
</table>

Note.  

a.  Predictors: (Constant), Affective Commitment  
b.  Predictors: (Constant), Affective, Normative Commitment  

*p<.01.
At $T_2$, the relationships among the three components of the commitment model change. For AC, the predictive value of NC is weaker than at $T_1$, as is the predictive value of CC. Table 32 illustrates the lower coefficients of determination for AC at $T_2$.

Table 32

<table>
<thead>
<tr>
<th>Affective Commitment Regressed on NC &amp; CC at $T_2$</th>
<th>R Square</th>
<th>Beta</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>.313</td>
<td>.559*</td>
<td>1.08375</td>
<td>.313</td>
<td>23.212</td>
<td>.000</td>
</tr>
<tr>
<td>b</td>
<td>.319</td>
<td>.530</td>
<td>1.08966</td>
<td>.006</td>
<td>.448</td>
<td>.506</td>
</tr>
</tbody>
</table>

Note.  

- a. Predictors (Constant), Normative Commitment
- b Predictors (Constant), Normative, Continuance Commitment

*p<.01.

Affective commitment also has a weakening predictive relationship to NC at $T_2$. Table 33 reflects the hierarchical regression statistics for NC at $T_2$. Table 33 also reveals the fact that continuance commitment has a slight strengthening of predictive value for NC at $T_2$, but this increase is not statistically significant.

Table 33

<table>
<thead>
<tr>
<th>Normative Commitment Regressed on AC &amp; CC at $T_2$</th>
<th>R Square</th>
<th>Beta</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>.313</td>
<td>.559*</td>
<td>1.04777</td>
<td>.313</td>
<td>23.212</td>
<td>.000</td>
</tr>
<tr>
<td>b</td>
<td>.357</td>
<td>.500*</td>
<td>1.02349</td>
<td>.044</td>
<td>3.448</td>
<td>.069</td>
</tr>
</tbody>
</table>

Note.  

- a Predictors: (Constant), Affective Commitment
- b Predictors: (Constant), Affective, Continuance Commitment

*p<.01.

Continuance commitment sustains a weaker relationship to AC and NC at $T_2$ than at $T_1$. Table 34 reflects the fact that the coefficient of determination for AC and NC is lower at $T_2$ than at $T_1$. Table 34 also reflects the influence of AC and NC on CC at $T_2$ in terms of the Beta statistic. This is almost inverse to the relationship between these variables at $T_1$. 
Table 34

Continuance Commitment Regressed on AC & NC at T2

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>Beta</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>.074</td>
<td>.271*</td>
<td>1.29151</td>
<td>.074</td>
<td>4.049</td>
<td>.049</td>
</tr>
<tr>
<td>b</td>
<td>.133</td>
<td>.106</td>
<td>1.26159</td>
<td>.060</td>
<td>3.448</td>
<td>.069</td>
</tr>
</tbody>
</table>

Note.  a  Predictors: (Constant), Affective Commitment  
       b  Predictors: (Constant), Affective, Normative Commitment  

*p<.05.

T3

The predictive value of normative and continuance commitment on AC continues to grow weaker at T3. Table 35 shows NC and CC having the weakest predictive value for AC at T3 than at either of the previous two time periods. Table 35 also illustrates that the Beta statistic for NC decreases slightly as compared to T2, while the CC Beta statistic show a slight, albeit statistically insignificant increase at T3.

Table 35

Affective Commitment Regressed on NC & CC at T3

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>Beta</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>.276</td>
<td>.526*</td>
<td>1.01408</td>
<td>.276</td>
<td>18.708</td>
<td>.000</td>
</tr>
<tr>
<td>b</td>
<td>.287</td>
<td>.495*</td>
<td>1.01716</td>
<td>.010</td>
<td>.703</td>
<td>.406</td>
</tr>
</tbody>
</table>

Note.  a  Predictors: (Constant), Normative Commitment  
       b  Predictors: (Constant), Normative, Continuance Commitment  

*p<.01.

Normative commitment at T3 holds almost the identical relationship to AC that AC has on NC. Table 36 shows the coefficient of determination to be the same for AC at is it for NC on AC (excluding the influence of CC). The Beta statistics for AC is also identical to NC. Table 36 also shows that AC and CC have a reduced Beta statistic from T2 to T3.
Table 36

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>Beta</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>.276</td>
<td>.526*</td>
<td>1.03844</td>
<td>.276</td>
<td>18.708</td>
<td>.000</td>
</tr>
<tr>
<td>b</td>
<td>.302</td>
<td>.484*</td>
<td>1.03030</td>
<td>.026</td>
<td>1.777</td>
<td>.189</td>
</tr>
</tbody>
</table>

Note.  

a Predictors: (Constant), Affective Commitment  
b Predictors: (Constant), Affective, Continuance Commitment

*p<.01.

Table 37 hierarchical regression statistics confirm that CC continues to have a weakening relationship to both AC and NC at T3. Both the AC and NC coefficients of determination drop from .055 to .043, and from .099 to .058, respectively. In Table 37 AC reflects a slight increase in the Beta statistic from T2, and NC has a slight drop.

Table 37

Continuance Commitment Regressed on AC & NC at T2

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>Beta</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>.062</td>
<td>.248</td>
<td>1.12407</td>
<td>.062</td>
<td>3.224</td>
<td>.079</td>
</tr>
<tr>
<td>b</td>
<td>.095</td>
<td>.135</td>
<td>1.11526</td>
<td>.034</td>
<td>1.777</td>
<td>.189</td>
</tr>
</tbody>
</table>

Note.  

a Predictors: (Constant), Affective Commitment  
b Predictors: (Constant), Affective, Normative Commitment

The pattern of scores on the commitment scales support previous research on the relationships among the three scales. Affective and normative commitment had a statistically significant correlation across all three time periods. The high correlation between these two scales also contributed to ensuring both scales held a predictive relationship to each other. And even though this relationship weakened slightly over the 60-day period, it remained significant. Continuance commitment was not as closely correlated to AC or NC, and therefore was not able to sustain a strong predictive relationship for either of the emotion-focused commitment scales at T1, T2 or T3.

Research Question #2

To what extent are these patterns influenced by the organizational tenure and occupational status of group members?

The response to this question required a hierarchical regression of each commitment scale on the demographic variables of company service (TRWSVC), Years of Work Experience (YRSWORK) and Occupational Status (OCCSTAT). Initially, company service and years of
work experience were believed to be so strongly correlated as to warrant a combination of the two variables into one (or using one as a proxy for the other), however, actual data proved that these two variables had a low enough correlation to warrant entering the variables separately. A hierarchical regression was used to measure the correlation of each of the three demographic variables on each commitment scale at T₁, T₂, and T₃. A summary of the regression statistics is provided at Appendix S. Tables 38, 39 and 40 contains a summary of the hierarchical regressions for AC, NC and CC respectively.

Table 38

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₁</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.052</td>
<td>1.18811</td>
<td>.052</td>
<td>3.052</td>
<td>.086</td>
</tr>
<tr>
<td>b</td>
<td>.161</td>
<td>1.12742</td>
<td>.110</td>
<td>7.191</td>
<td>.010</td>
</tr>
<tr>
<td>c</td>
<td>.168</td>
<td>1.13300</td>
<td>.007</td>
<td>.460</td>
<td>.501</td>
</tr>
<tr>
<td>T₁</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.008</td>
<td>1.30194</td>
<td>.008</td>
<td>.422</td>
<td>.519</td>
</tr>
<tr>
<td>b</td>
<td>.057</td>
<td>1.28212</td>
<td>.049</td>
<td>2.589</td>
<td>.114</td>
</tr>
<tr>
<td>c</td>
<td>.069</td>
<td>1.28702</td>
<td>.012</td>
<td>.620</td>
<td>.435</td>
</tr>
<tr>
<td>T₃</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.027</td>
<td>1.17612</td>
<td>.027</td>
<td>1.337</td>
<td>.253</td>
</tr>
<tr>
<td>b</td>
<td>.137</td>
<td>1.11873</td>
<td>.111</td>
<td>6.156</td>
<td>.017</td>
</tr>
<tr>
<td>c</td>
<td>.141</td>
<td>1.12808</td>
<td>.004</td>
<td>.207</td>
<td>.651</td>
</tr>
</tbody>
</table>

Note. a Predictors: (Constant), TRWSVC
b Predictors: (Constant), TRWSVC, YRSWORK
c Predictors: (Constant), TRWSVC, YRSWORK, OCCSTAT

Table 39

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₁</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.009</td>
<td>1.19441</td>
<td>.009</td>
<td>.487</td>
<td>.488</td>
</tr>
<tr>
<td>b</td>
<td>.088</td>
<td>1.15627</td>
<td>.079</td>
<td>4.756</td>
<td>.033</td>
</tr>
<tr>
<td>c</td>
<td>.157</td>
<td>1.12168</td>
<td>.069</td>
<td>4.444</td>
<td>.040</td>
</tr>
<tr>
<td>T₁</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.006</td>
<td>1.26038</td>
<td>.006</td>
<td>.287</td>
<td>.594</td>
</tr>
<tr>
<td>b</td>
<td>.046</td>
<td>1.24680</td>
<td>.040</td>
<td>2.117</td>
<td>.152</td>
</tr>
<tr>
<td>c</td>
<td>.085</td>
<td>1.23330</td>
<td>.039</td>
<td>2.101</td>
<td>.154</td>
</tr>
<tr>
<td>T₃</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.002</td>
<td>1.21955</td>
<td>.002</td>
<td>.092</td>
<td>.763</td>
</tr>
<tr>
<td>b</td>
<td>.039</td>
<td>1.20896</td>
<td>.037</td>
<td>1.862</td>
<td>.179</td>
</tr>
<tr>
<td>c</td>
<td>.066</td>
<td>1.20437</td>
<td>.027</td>
<td>1.367</td>
<td>.248</td>
</tr>
</tbody>
</table>

Note. a Predictors: (Constant), TRWSVC
b Predictors: (Constant), TRWSVC, YRSWORK
c Predictors: (Constant), TRWSVC, YRSWORK, OCCSTAT
Table 40

*Continuance Commitment Regressed on Demographic Variables*

<table>
<thead>
<tr>
<th>R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₁</td>
<td>a</td>
<td>.104</td>
<td>1.06330</td>
<td>.104</td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>.286</td>
<td>.95773</td>
<td>.182</td>
</tr>
<tr>
<td></td>
<td>c</td>
<td>.325</td>
<td>.93975</td>
<td>.039</td>
</tr>
<tr>
<td></td>
<td>T₂</td>
<td>a</td>
<td>.015</td>
<td>1.33142</td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>.153</td>
<td>1.24682</td>
<td>.138</td>
</tr>
<tr>
<td></td>
<td>c</td>
<td>.154</td>
<td>1.25915</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>T₃</td>
<td>a</td>
<td>.040</td>
<td>1.13691</td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>.150</td>
<td>1.08109</td>
<td>.110</td>
</tr>
<tr>
<td></td>
<td>c</td>
<td>.150</td>
<td>1.09252</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note. a Predictors: (Constant), TRWSVC
     b Predictors: (Constant), TRWSVC, YRSWORK
     c Predictors: (Constant), TRWSVC, YRSWORK, OCCSTAT

The three demographic variables proved their most predictive value for CC. The strongest coefficients of determination are present at T₁, and decrease over time to their lowest predictive value at T₃. Note that company service also has a stronger predictive relationship to AC than NC at T₁, but not at T₂ or T₃, where company service seems to have a very weak coefficient of determination for both the affective or normative commitment scales. Years of total work experience added slight predictive value for AC at T₁ and T₃, and for NC at T₁. The greatest predictive value for years of work experience was for CC at T₁, T₂, and T₃.

To determine the influence of occupational category on commitment, a hierarchical regression using company service and years of work was completed for each commitment scale from T₁ to T₃, controlling for occupational category. The summary results of this hierarchical regression are available on pages four and five of Appendix S. The impact of a further dilution of already weak predictive relationships is reflected in the results of these regressions. Demographic variables appear to have a small statistically significant impact at the Exempt Non-Manager occupational level, and only when both company service and total years of work experience are combined.

**Research Question #3**

To what extent are these patterns influenced by the level of positive affect and adaptive coping attributes of group members?

To answer this question, the dispositional scales representing positive affect (PA) and adaptive coping (ADC) were regressed on the three commitment scales at T₁, T₂, and T₃ using a hierarchical approach. The full results of these regression statistics are shown at Appendix T. Tables 41, 42 and 43 represent the hierarchical regression of positive affect and adaptive coping on AC, NC and CC, respectively.
Table 41

**Affective Commitment Regressed on Positive Affect & Adaptive Coping**

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T_1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.247</td>
<td>1.05857</td>
<td>.247</td>
<td>18.389</td>
<td>.000</td>
</tr>
<tr>
<td>b</td>
<td>.250</td>
<td>1.06607</td>
<td>.003</td>
<td>.215</td>
<td>.644</td>
</tr>
<tr>
<td><strong>T_2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.405</td>
<td>1.00867</td>
<td>.405</td>
<td>34.671</td>
<td>.000</td>
</tr>
<tr>
<td>b</td>
<td>.424</td>
<td>1.00202</td>
<td>.019</td>
<td>1.679</td>
<td>.201</td>
</tr>
<tr>
<td><strong>T_3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.410</td>
<td>.91575</td>
<td>.410</td>
<td>34.029</td>
<td>.000</td>
</tr>
<tr>
<td>b</td>
<td>.413</td>
<td>.92299</td>
<td>.003</td>
<td>.235</td>
<td>.630</td>
</tr>
</tbody>
</table>

Note.  

a Predictors: (Constant), Positive Affect  
b Predictors: (Constant), Positive Affect, Adaptive Coping

Table 42

**Normative Commitment Regressed on Positive Affect & Adaptive Coping**

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T_1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.159</td>
<td>1.10005</td>
<td>.159</td>
<td>10.594</td>
<td>.002</td>
</tr>
<tr>
<td>b</td>
<td>.160</td>
<td>1.10917</td>
<td>.001</td>
<td>.083</td>
<td>.774</td>
</tr>
<tr>
<td><strong>T_2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.325</td>
<td>1.03830</td>
<td>.325</td>
<td>24.572</td>
<td>.000</td>
</tr>
<tr>
<td>b</td>
<td>.325</td>
<td>1.04861</td>
<td>.000</td>
<td>.003</td>
<td>.959</td>
</tr>
<tr>
<td><strong>T_3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.233</td>
<td>1.06922</td>
<td>.233</td>
<td>14.867</td>
<td>.000</td>
</tr>
<tr>
<td>b</td>
<td>.244</td>
<td>1.07262</td>
<td>.011</td>
<td>.690</td>
<td>.410</td>
</tr>
</tbody>
</table>

Note.  
a Predictors: (Constant), Positive Affect  
b Predictors: (Constant), Positive Affect, Adaptive Coping

Table 43

**Continuance Commitment Regressed on Positive Affect & Adaptive Coping**

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T_1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.002</td>
<td>1.12278</td>
<td>.002</td>
<td>.085</td>
<td>.772</td>
</tr>
<tr>
<td>b</td>
<td>.066</td>
<td>1.09569</td>
<td>.065</td>
<td>3.802</td>
<td>.056</td>
</tr>
<tr>
<td><strong>T_2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.066</td>
<td>1.29657</td>
<td>.066</td>
<td>3.620</td>
<td>.063</td>
</tr>
<tr>
<td>b</td>
<td>.130</td>
<td>1.26375</td>
<td>.064</td>
<td>3.684</td>
<td>.061</td>
</tr>
<tr>
<td><strong>T_3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.011</td>
<td>1.15384</td>
<td>.011</td>
<td>.564</td>
<td>.456</td>
</tr>
<tr>
<td>b</td>
<td>.020</td>
<td>1.16072</td>
<td>.009</td>
<td>.421</td>
<td>.520</td>
</tr>
</tbody>
</table>

Note.  
a Predictors: (Constant), Positive Affect  
b Predictors: (Constant), Positive Affect, Adaptive Coping

Positive affect appears to have the strongest coefficient of determination for affective commitment. At **T_1**, PA has an R² of .247, which increases to .410 at **T_3**. For normative commitment, PA starts with a low R² of .159, which increases to .325 at **T_2**, and finally settles
back to a coefficient of determination of .233 at T3. For continuance commitment, PA has no statistically significant predictive value at T1, T2, and T3.

Adaptive coping proves to have no predictive value for either of the emotion-focused commitment scales at T1, T2, and T3. For continuance commitment, ADC does show a larger $R^2$ change at T1 versus PA, but the influence of ADC on CC decreases at T2 and T3. The influence of occupational status on positive affect and adaptive coping was also explored to better understand the differences between the different employee groups. Only two categories had sufficient cases to develop relevant summary statistics—Managers (Occupational Status= 2) and Exempt Non-Managers (Occupational Status= 3). Table 44 provides a summary of the descriptive statistics for PA and ADC by all four occupational status categories.

Table 44  

Descriptive Statistics for PA and ADC by Occupational Status

<table>
<thead>
<tr>
<th>Occupational Category</th>
<th>T1 Positive Affect</th>
<th>Adaptive Coping</th>
<th>T2 Positive Affect</th>
<th>Adaptive Coping</th>
<th>T3 Positive Affect</th>
<th>Adaptive Coping</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Manager</td>
<td>Mean</td>
<td>3.3500</td>
<td>3.8500</td>
<td>3.1375</td>
<td>3.7479</td>
<td>3.1533</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>18</td>
<td>18</td>
<td>16</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Std. Dev.</td>
<td>.79280</td>
<td>.43375</td>
<td>1.03915</td>
<td>.32998</td>
<td>1.00773</td>
</tr>
<tr>
<td>Exempt Non-Manager</td>
<td>Mean</td>
<td>2.9742</td>
<td>3.7387</td>
<td>3.1464</td>
<td>3.7976</td>
<td>3.1321</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>31</td>
<td>31</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Std. Dev.</td>
<td>.97672</td>
<td>.32999</td>
<td>.91631</td>
<td>.31413</td>
<td>.93494</td>
</tr>
<tr>
<td>Non-Exempt</td>
<td>Mean</td>
<td>4.0875</td>
<td>3.5917</td>
<td>3.9250</td>
<td>3.6083</td>
<td>3.9143</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Std. Dev.</td>
<td>.53302</td>
<td>.12941</td>
<td>.95879</td>
<td>.23077</td>
<td>.74482</td>
</tr>
<tr>
<td>Total</td>
<td>Mean</td>
<td>3.2603</td>
<td>3.7534</td>
<td>3.2811</td>
<td>3.7541</td>
<td>3.2667</td>
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<tr>
<td></td>
<td>N</td>
<td>58</td>
<td>58</td>
<td>53</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Std. Dev.</td>
<td>.93526</td>
<td>.34960</td>
<td>.98353</td>
<td>.30685</td>
<td>.95555</td>
</tr>
</tbody>
</table>

The data in Table 44 reflects some interesting patterns. Managers have a 3.35 average score for positive affect at T1, which drops slightly at T2, and stays about the same at T3.
Managers could be feeling a higher level of uncertainty than their subordinates regarding their future with the organization. Manager’s adaptive coping score starts high (3.85) at T₁, then drops continuously from T₂ to T₃. This lower mean score at T₃ could represent a reaction to the increased job-related pressures brought on by the chaos of the post-integration process.

Exempt Non-managers’ mean positive affect score of 2.97 at T₁ increases at T₂ to 3.15, and then remains about the same for T₃. Exempt Non-managers make up the bulk of the division’s workforce (76%). These employees are the “doers” of the organization, and have been the least impacted by the acquisition, as their work is directly tied to specific contract or fee-paid projects. However, this small sample may also be feeling the strain of the acquisition, as the Exempt-Non-manager adaptive coping scores also show a decline from T₂ to T₃.

Research Question #4

To what extent are these patterns influenced by the perception of success of the acquisition by group members?

As stated previously, the EPAS scale was developed to measure the employee perception of the acquisition success at T₁, T₂, and T₃. Given the low alpha scores for the EPAS scale at T₁, T₂, and T₃, a reliability analysis was completed to determine if the removal of any questions would increase the reliability index. It was determined that removing question #4 (“I am comfortable with the level of communication from my supervisors and managers regarding the progress of the acquisition.”), EPAS reliability increases slightly at T₁, T₂ and T₃. A new scale was created titled EPAS_Mod which did not include the responses to question #4. For the purposes of answering research question #4, the EPAS_Mod scale was used for the regression analysis.

Table 45 lists the regression statistics for the EPAS_Mod scale. For AC, the EPAS_Mod scale did not show a significant predictive relationship at T₁. At T₂, however, the EPAS_Mod scales showed a strong and significant predictive relationship to AC (β=.524). For NC, the EPAS_Mod scale showed a strong relationship, and there is a slight increase in coefficient of determination (and corresponding Beta value) from T₁ to T₂. This positive trend does not carry for NC and EPAS through to T₃. The EPAS_Mod scale had no significant relationship to the CC scale, and what relationship does exist was negative for both T₁ and T₂.

Table 45

<table>
<thead>
<tr>
<th>Commitment Scales Regressed on EPAS_Mod</th>
<th>T₁</th>
<th></th>
<th>T₂</th>
<th></th>
<th>T₃</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>Beta</td>
<td>t</td>
<td>b</td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>Affective</td>
<td>.378</td>
<td>.159</td>
<td>1.202</td>
<td>1.183</td>
<td>.524*</td>
<td>4.390</td>
</tr>
<tr>
<td>R²</td>
<td>.025</td>
<td></td>
<td></td>
<td>.274</td>
<td></td>
<td>.067</td>
</tr>
<tr>
<td>Normative</td>
<td>.412</td>
<td>.176</td>
<td>1.337</td>
<td>.624</td>
<td>.286</td>
<td>2.128</td>
</tr>
<tr>
<td>R²</td>
<td>.031</td>
<td></td>
<td></td>
<td>.082</td>
<td></td>
<td>.035</td>
</tr>
<tr>
<td>Continuance</td>
<td>-2.64</td>
<td>-.120</td>
<td>-.907</td>
<td>-1.28</td>
<td>-.055</td>
<td>-.394</td>
</tr>
<tr>
<td>R²</td>
<td>.014</td>
<td></td>
<td></td>
<td>.003</td>
<td></td>
<td>.001</td>
</tr>
</tbody>
</table>

*p<.01
In addition to answering the four research questions, it seemed logical to run a hierarchical regression employing all the independent variables on each of the three commitment scales at $T_1$, $T_2$ and $T_3$. Appendix U is a summary of the hierarchical regression statistics. A review of the previous hierarchical regressions suggested that each commitment scale had a unique relationship to the independent variables, which required separate approaches to the ordering of independent variables for this hierarchical regression.

The full model hierarchical regressions show the independent variables have a varying degree of influence on each of the commitment scales over time. For affective commitment, the independent variables have an increasing predictive value from $T_1$ to $T_3$. It is interesting to note that at $T_1$ to $T_2$, the independent variables account for more than half of the predictive value for affective commitment. For normative commitment, the coefficient of determination increases from $T_1$ to $T_2$ and decreases from $T_2$ to $T_3$, accounting overall for an average of one third of the predictive value of the independent variables. Finally, for continuance commitment, the independent variables show a progressively reduced predictive value from $T_1$ to $T_3$.

**Discussion**

The purpose of this discussion is to first clarify what the findings are, and then tie the findings to the literature, and to gain an understanding of the data viewed through current theory regarding employee commitment. This discussion will first review demographic variables, then the dispositional attributes, followed by a discussion of the influence of perceived acquisition success on commitment. The final part of this discussion will review the three different commitment scales, and determine what meaning was gained from the data in regards to these scales.

**Demographic Variables**

Company service was the only demographic variable that provided a significant predictor of commitment for this sample. The literature also suggests that organizational tenure is a more robust indicator of organizational commitment than years of total work experience (Beck & Wilson, 2000). Several studies have provided empirical evidence that there is a positive relationship between organizational tenure and affective commitment (Beck & Wilson, 2000; Morrow, 1993; R. Mowday et al., 1982). These studies support the belief that “…experience of an organization is a necessary prerequisite to the development of organizational commitment, since one requires a knowledge or understanding of an entity before one can be committed to it.” (Beck & Wilson, 2000, p. 118).

Total years work experience, as expected, proved to have little value in predicting commitment. This is supported by the literature, where an analysis of a related and directly correlated variable, age, was found to have a very weak link to continuance commitment in one study (Morrow, 1993), and low positive correlations in several other commitment studies (R. T. Mowday & Steers, 1979). It is interesting to note in this particular sample that total years of work experience seems to have a negative, albeit weak, predictive relationship to all three commitment scales. The nature of the workforce, which comprises the sample, gives several clues as to why these negative relationships exist. In addition, the difference in the percentage of
Manager and Exempt Non-Managers completing the survey, as compared to the actual population, leads to the belief that there may be serious response bias issues.

As previously stated, normative commitment refers to an employee’s feeling of obligation to remain with the organization (Meyer & Allen, 1997). Given the nature of the workforce (highly transient, project-based), it would seem logical that employees with many years of work experience, yet with varying lengths of company service, would not have a strong sense of obligation to the organization.

According to Meyer & Allen: “Employees who have strong continuance commitment to an organization stay with the organization because they believe they have to do so.” (Meyer & Allen, 1997, p. 56). The negative correlation demonstrated by the data demonstrates that for this sample, the greater the years of work experience, the lower the level of continuance commitment. Again, given the nature of the workforce, this negative correlation has merit, since a majority of the workers are hired on a project basis, and more for skills directly applicable to project completion, than for knowledge gained through tenure in the organization. Affective commitment, which is the employee’s emotional attachment to the organization (Meyer & Allen, 1997), also hinges on the employee’s attachment to an organization over time, versus total years of work experience. A recent meta-analysis of the ANC scale also concluded that age (a proxy for years of work experience) and organizational tenure correlated weakly with all three components of commitment (Meyer et al., 2001).

**Dispositional Attributes**

Of the two dispositional attributes, positive affect provided the greatest level of predictive value for the three commitment scales. The strongest relationships were demonstrated for affective and normative commitment across all three time periods. The explanation for the strength of these relationships stems from the belief that both affective and normative commitment scales are rooted in employee emotional links to the organization. The PANAS scale, which measures both positive and negative affect, measures an individual’s emotional state. As various scales of emotional states have proven in other studies to be highly correlated (David Watson & Lee Anna Clark, 1994), it would seem logical to speculate that the PANAS and affective and normative commitment scales would also sustain the same high correlations. In turn, the continuance or calculative commitment scale centers on the exchange component of the employee-organization relationship (Morrow, 1993, p. 74), which is transactional versus emotion focused. Therefore, a strong link between positive affect and continuance commitment is not expected.

The Personal Functioning Inventory (PFI), an adaptive coping instrument, was created to measure an individual’s level of problem (versus emotion) focused coping (Kohn, Wood, Pickering et al., 2002). The instrument had demonstrated good internal consistency and reliability when administered to samples of individuals not experiencing organizational change (Kohn, Wood, Pickering et al., 2002). However, when the instrument was administered to employees experiencing a post-acquisition integration process, the results were less consistent. The reason for this low level of consistency may be traced to the belief by the respondents that the instrument posed questions that appeared to be invasive or were of an assessment nature. At a pre-survey focus group with legacy TRW HR leaders, the PFI was singled out as a possible
source of concern, as it was perceived that the questions might be a bit personal for the audience to complete, even with the guarantee of anonymity. This possible source of the survey’s high non-response rate could not be explored, as the host organization would not allow non-employees to contact their employees on acquisition-related issues.

This concern that the survey was an assessment tool was born out during the administration of the first survey. During the administration of the first survey, several employees responded by e-mail to both the test administrator and the legacy TRW HR leadership that they would not be completing the survey specifically due to the fact that the questions posed in the PFI were “… too personal, and will keep me from answering truthfully.” (Respondent 261, 2002). This may be the reason why so many “false starts” were recorded during the administration of the first survey. Unfortunately, given the third-party nature of the relationship with the host organization (and promise of anonymity), I was unable to explore these issues with the non-respondents. The reader must be cautioned that the sample is strongly bias, both from a demographic as well as possibly a strong social desirability response bias (as discussed in Chapter Four).

Insights gained from the literature support the perception that the bimodal distribution of scores on the PFI at T3 may be as a result of the chronic stress felt by the sample respondents at the time they completed the survey. Individuals’ belief in their ability to sustain a problem-focused approach to coping begins to erode during prolonged periods of stress associated with unrelenting individual change. This is further supported by the increased influence of negative affect on the adaptive coping scale at T3. According to the literature, negative affect has an increasing influence on an individual’s adaptive coping traits over an extended period of chronic stress (Folkman & Moskowski, 2000).

Employee Perception of Acquisition Success

The EPAS scale was developed to measure the employee’s perception of acquisition success based on: (a) the employee’s perception of the financial success of the acquisition, (b) the employees’ belief that the acquisition will positively impact the employee’s career and, (c) the employees’ satisfaction with the level of communication regarding the acquisition.

Through a reliability analysis, question four (“I am comfortable with the level of communication from my supervisors and managers regarding the progress of the acquisition.”) was removed to create an EPAS_Mod scale, which had a higher Cronbach’s alpha than the original EPAS scale. Literature suggests that one of the main reasons employees do not feel positive about the success of the acquisition is due to the low level of communication from organizational leadership regarding acquisition issues (Bourantis & Nicandrou, 1997; Cartwright & Cooper, 1996; Singh, 1999; Troiano, 1999). The reliability analysis reflects the belief that poor management communications may be an issue for this particular sample of employees.

The EPAS scale had a stronger predictive relationship for both the emotion-focused scales of affective and normative commitment. This relationship weakens over time. The reason for this weakening relationship may be due to the fact that, as time progressed, employees were less concerned about the transactional success of the acquisition and more focused on cultural integration, which usually begins to become a concern at or about 90 days after the date of the
acquisition (Cartwright & Cooper, 1993; Cartwright & Cooper, 1996; Galpin & Herndon, 2000; Hunsaker & Coombs, 1988). For the continuance commitment scale, the EPAS initially reflected a negative correlation, which reversed to a positive relationship at T3. This relationship is so slight as to be insignificant for the purpose of further explanatory analysis.

Commitment Scales
All three commitment scales show a reduction in mean scores from T1 to T3. In addition, the correlations between the commitment scales weakens from T1 to T3. In terms of correlations, both affective and normative commitment share a higher correlation to each other than either does to continuance commitment. This is similar to empirical studies, which also endorse stronger affective-normative commitment scale correlations than affective-continuance or normative-continuance (Meyer et al., 2001). Reliabilities for each scale are also consistent with reliabilities derived from a recent meta-analysis of the ANC (Meyer et al., 2001). A summary of this analysis is provided in Table 46.

Table 46

<table>
<thead>
<tr>
<th>Commitment Scale</th>
<th>Time</th>
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<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>T1</td>
<td>T2</td>
<td>T3</td>
<td>Meta- Analysis</td>
</tr>
<tr>
<td>Affective</td>
<td>.85</td>
<td>.89</td>
<td>.88</td>
<td>.82</td>
</tr>
<tr>
<td>Normative</td>
<td>.85</td>
<td>.89</td>
<td>.85</td>
<td>.73</td>
</tr>
<tr>
<td>Continuance</td>
<td>.80</td>
<td>.87</td>
<td>.80</td>
<td>.76</td>
</tr>
</tbody>
</table>

The three components of commitment had varying degrees of predictive relationships between T1, T2 and T3. Affective commitment shows a predicted strong coefficient of determination from T1 to T2. However, from T2 and T3, there is a surprisingly low R². Yet for normative and continuance commitment, the reverse holds true. At present, there is no explanation for this inconsistency in the data.

Summary
Employees who are beginning a post-acquisition integration process are beginning an experiential learning journey. The data supports the belief that for this sample the first sixty days are a period of mixed feelings about employee-organization commitment. However, even though these feelings are mixed, the influence of the combined independent variables on the ANC scale is statistically significant at all three time periods. In the subsequent chapter, these relationships between the variables will be further explored in order to more fully comprehend what is happening to these employees during this challenging time of organizational change.
CHAPTER V- SUMMARY, CONCLUSIONS, RECOMMENDATIONS

Introduction

A merger or acquisition will impact over one in four employees in the United States in the next three years (Hamel, 2000). In 1999, three trillion dollars worth of mergers were announced (Hamel, 2000). Empirical research supports the belief that over 50% of these mergers and acquisitions will fail to meet the financial returns necessary to increase shareholder value (Cartwright & Cooper, 1996; Hamel, 2000). This lack of post-acquisition success has until recently been mainly attributed to financial or market economic issues (Pritchett, 1996). Recent studies however lead to the belief that human versus financial factors are among the root causes of merger and acquisition failure (Gadiesh, et al., 2001).

Several recent studies specifically theorize that a low level of employee–organization commitment during the initial post-acquisition period has an influence on the overall success of the acquisition (Del Vecchio, 1999; Ozag, 2001). Additionally, researchers believe employees who successfully complete the post-acquisition commitment journey undergo a powerful change process (Cartwright & Cooper, 1990; Schaeffer, 1999; Schein, 2000). Completing an experiential learning, or change process requires certain individual dispositional attributes (Marsik, 1990; Mezirow, 2000). No research has been accomplished to date that explores whether or not the same attributes that positively influence an experiential learning journey may also have an influence on post-acquisition commitment.

Literature Review

Mergers and acquisitions (M&As) are common processes that occur in a capitalist economy. M&As are a means by which to increase shareholder value through the purchase of another entity or enterprise. They occur between corporations, limited partnerships and sole–proprietorships, and the pursuit and purchase of an acquisition has varying degrees of mutual intent. The spirit, or intent of the acquisition is often stated in levels of hostility. The hostility level is inversely related to the level of enthusiasm displayed by the firm to be acquired towards the acquiring firm. The more hostile the acquisition posture of the pursuing firm, the more resistant the acquiring firm will be to the merger.

Common to all M&As is the period immediately prior to the purchase. This period is called the due diligence phase of the acquisition. During due diligence, the acquiring firm completes a review and analysis of the target acquisition’s human, financial and physical capital. The depth and thoroughness of this review process is also inversely related to the level of hostility. The more friendly the acquisition, the more complete the review. The experiences and behaviors demonstrated by the acquiring firm’s leadership during the due diligence phase often sets the tone for the subsequent post-acquisition relationship between the employees of the two merging organizations. After the completion of due diligence, a sale price and date for the change of control are negotiated, which require approval by the respective organizations’ stakeholders as well as the appropriate government agencies.

The change of control date signals the beginning of the post-acquisition integration process. Common to this process is the reaction of employees of the acquired firm to the acquisition. Acquired employees feel a sense of loss of connection to a legacy organization.
similar to the experience associated with the loss of a significant other. These employees frequently exhibit behaviors consistent with the bereavement process as a means of coping with the changing nature of the workplace. Another coping strategy results in what has been identified as the merger syndrome, which is a reaction to the stress induced by the acquisition process (Marks & Mirvis, 1998; Mirvis, 1985). Employees who are believed to have merger syndrome exhibit the behaviors identified in Table 47.

Table 47

<table>
<thead>
<tr>
<th>Merger Syndrome Behaviors</th>
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<tbody>
<tr>
<td>Behavior</td>
</tr>
<tr>
<td>Personal pre-occupation</td>
</tr>
<tr>
<td>Worst-case scenario scripting</td>
</tr>
<tr>
<td>Rumor-mongering</td>
</tr>
<tr>
<td>Distractions from job performance</td>
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<tr>
<td>Psychosomatic reactions</td>
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</table>


The behaviors associated with merger syndrome have been identified as the same behaviors exhibited by employees who have low employee-organization commitment (A. Cohen, 1992; R. Mowday et al., 1982). Lack of employee commitment to the new organization has been cited as one of the primary reasons merges and acquisitions fail to meet both financial and balanced scorecard metrics (Brousseau, 1989; DelVecchio, 1999; Fitzgerald, 2002; Hamel, 2000; Mirvis, 1985; Ozag, 2001).

The primary stakeholder during the post-acquisition process is the employee (Cartwright & Cooper, 1990; Schaeffer, 1999). The impact of organizational change on the employee has been described as a traumatic event similar in context to the loss of a loved one (Mirvis, 1985), or likened to a child experiencing the re-marriage of a parent (Murphy, 1998). For the employee, the initiation of the acquisition process is similar to the first step of a transformational journey. An initial disruptive event (the announcement of the acquisition) is followed by an organization-wide reflection on the missions and values of the acquired enterprise. From this critical reflection, the employee begins to develop new meaning schemes to deal with the discrepancies surfaced by the triggering event. Finally, the employee, through the post-integration process, integrates the new perspective into his or her life. Committing to a new enterprise requires the employee to successfully complete a transformational learning journey. If the employee fails to commit to the merged organization, the subsequent lack of employee-organization linkage is manifested in behaviors that reflect low or no commitment to the new enterprise. In addition to the behaviors listed as being related to merger syndrome, they may also include high absenteeism (R. T. Mowday & Steers, 1979), increased turnover (N. J. Allen & Meyer, 1996), and lower productivity (Cartwright & Cooper, 1993; Weber, 1996).

Organizational leadership is another key stakeholder in the acquisition process. Executives and managers are accountable to external shareholders, boards of directors and employees for the ultimate success of the acquisition (Gaughan, 2002). The obligation of this employee group extends beyond financial drivers to the emotional leadership necessary to
Antecedents to Commitment

engage employee commitment to the new enterprise. Several researchers have suggested that the primary goal of leaders immediately after an acquisition is to engage employees in the re-establishment of employee-organization linkages (Gadiesh et al., 2001; Habeck et al., 2000; Hunsaker & Coombs, 1988; Jones & Pollard, 2000).

A third stakeholder group is the human resources function. Human resource practitioners are chartered with the mission of ensuring sustained engagement of human capital in the creation of value for the enterprise. To achieve this mission, human resource leaders are required to facilitate the re-establishment of employee-organizational linkages to the new enterprise (Hickins, 1999; Hilborn et al., 1999; Kramer, 1999; Krell, 2001; Nahavandi & Malekzadeh, 1988). The effectiveness of this facilitation is observed through the velocity and depth of commitment, as measured in part, by reduced turnover, increased productivity and lowered absenteeism.

A final, but no less important stakeholder in the acquisition process is the customer. Lack of employee commitment to the new enterprise has shown to be manifested in poor customer service behaviors (Borak, 2001). The quicker employees are committed to the new enterprise, the quicker they focus back on behaviors that support good customer service and add revenue to the organization’s bottom line.

Employee-organizational commitment has been widely studied over the past thirty years. One of the more popular commitment paradigms has been Allen & Meyer’s Affective, Normative, and Continuance Commitment (ANC) Model (N. J. Allen & Meyer, 1996). Affective commitment is related to the employee’s emotional attachment to the organization. Normative commitment describes the employee’s feeling of obligation to continue employment with the organization. Both are considered emotion-focused commitment constructs. Continuance, or calculative commitment is defined as the employee’s desire to stay with an organization as a result of not having viable alternatives. A recent meta-analysis of the ANC model forwards the belief that there may be certain personality attributes that are antecedent to employee-organization commitment. And while there have been numerous studies which have linked these three components of the commitment model to various job-related constructs, no work has been done to date to explore the influence of specific personality attributes on the ANC model.

Determining which antecedents to post-acquisition employee-organization commitment would have the greatest predictive value led to a review of literature that focused on how individuals cope successfully with change. Successfully navigating a change process was linked to the completion of a transformational learning journey. To discover what personality attributes influence post-acquisition commitment, the fields of family-marriage therapy and adult learning were plumbed. Within the field of family and marriage therapy, specific research surrounding the divorce-remarriage process holds a proxy value for the study of employee-organization commitment after an acquisition. The field of adult learning was chosen due to the belief that to successfully complete an experiential learning journey certain common personality attributes are required.
Through an exploration of the transformational learning process and Theory of Margin, the attribute of positive affect (PA) was identified as having an influence on the completion of a learning journey. In addition, problem-focused or adaptive coping (ADC) was found to be a requirement for sustaining both an action-orientation to experiential learning as well as necessary to maintaining a level of Power to manage one’s Load. From family and marriage therapy research, the belief that an adaptive approach to coping was a key attribute necessary for dealing with major life stressors. Relating positive affect to commitment, children who had demonstrated a positive emotional orientation towards stepfamily formation were believed to have had a stronger influence on the survivability of stepfamily relationships than those children who entered the stepfamily formation process with a perceived negative emotional orientation. Therefore, from the literature, two antecedents to the emotion-focused commitment scales are proposed. These proposed antecedents are the dispositional attributes of positive affect (David Watson & Lee Anna Clark, 1994) and adaptive coping (Kohn, Wood, Pickering et al., 2002).

For continuance commitment, proposed antecedents include company tenure and years in the workforce. Research has shown that both company tenure and the length of time an employee has been in the workforce have an influence on the continuance commitment scale (Morrow, 1993). In addition to dispositional attributes, the literature suggests that organizational tenure had a positive predictive relationship to the emotion-focused commitment components of affective and normative commitment (Meyer et al., 2001).

The context of the post-acquisition change process was also explored in the literature. Several recent studies have developed the belief that the stronger an employee’s perception of acquisition success, the greater the level of post-acquisition employee commitment (DelVecchio, 1999; Ozag, 2001). During this time, employees’ beliefs regarding the future state of the organization may have an influence on employee-organization commitment. This perception of the ultimate success of the acquisition is based on feelings about: (a) level of communications, (b) personal career development, and (c) financial success of the acquisition.

The study of post-acquisition employee-organization commitment is critical to supporting the success of mergers and acquisitions. Research has shown that each of the various stakeholders in the post-acquisition integration process has a linkage to employee-organization commitment. Completing the employee-organization commitment process requires employees to have certain dispositional attributes that facilitate commitment to a new organization. It is important to determine what variables influence commitment during a period of post-acquisition integration.

**Statement of the Problem**

I believe for employees to successfully commit to a new organization after an acquisition, they need to exhibit proactive and adaptive behaviors. Employees who are flexible enough to find a way to adapt to new situations, and who actively seek solutions to problems, will find a way to justify remaining with the new, post-acquisition organization. The purpose of the research was to answer the following four questions.
Research Question #1
What pattern of scores on the commitment scales over three time periods are exhibited by a group of employees involved in a merger of two companies?

Research Question #2
To what extent are these patterns influenced by the organizational tenure and occupational status of group members?

Research Question #3
To what extent are these patterns influenced by the level of positive affect and adaptive coping attributes of group members?

Research Question #4
To what extent are these patterns influenced by the perception of success of the acquisition by group members?

Method
Selecting a sample group to participate in this research was a matter of both luck and timing. In the spring of 2002, Northrop Grumman announced the acquisition of TRW, with December, 2002 change of control date. Through a personal contact with TRW’s HR leadership, employees from TRW’s IT group were chosen to participate in this study. This sample was chosen due to (a) convenient access to the sample group, and (b) the opportune timing of the change of control date- which coincided with the timeframe of this study. The survey was distributed to these employees at three separate time periods. The first survey (T₁) was distributed at the change of control date. The second survey was administered 30 days after the change of control date (T₂), with the final survey being administered 60 days after the change of control date (T₃).

The survey was comprised of three instruments. The first was the Allen and Meyer Affective, Normative and Continuance (ANC) commitment scale (Meyer & Allen, 1997). The second was the Positive and Negative Affect scale (David Watson & Lee Anna Clark, 1994), and the third was the personal functioning inventory (PFI) which measures individual adaptive coping (Kohn, Wood, Pickering et al., 2002). A fourth instrument measuring the employee perception of acquisition success (EPAS) was developed specifically for this dissertation. In addition to the aforementioned scales, demographic data on: (a) years of company service and (b) total years of work experience were collected for each subject.

Turnover was a serious concern, as the respondent pool slowly shrank from 58, to 53, and finally to 51 respondents. A second minor concern was the timing of the survey. The surveys were sent out on or about December 11, January 11 and February 11. The overlap of holidays and end- of- year project management deadlines, combined with the stress of the acquisition, also contributed to a lower than expected response rate. Initial response to surveys from T₂ to T₃ was light. A reminder e-mail was sent to non-respondents three days after the first e-mail. A subsequent wave analysis showed no significant difference in the commitment scales mean scores between the first and second wave respondents at either T₂ or T₃.

Descriptive statistics were computed for the demographic variables, dispositional attributes, the EPAS scale and the three components of the ANC commitment model. The relationship between adaptive coping and positive affect was explored through linear regression.
Hierarchical regression was used to understand the influence of the demographic variables and dispositional attributes on affective, normative and continuance commitment scores. Regression analysis was used to understand (a) some of the inter-relationships within each commitment scale, and (b) the relationship between each commitment scale at T₁, T₂ and T₃.

**Findings**

The findings of this study provide several interesting insights into post-acquisition employee commitment. The first finding was in the area of the demographics. Fifty-one employees completed all three surveys. Of those completing the surveys, 29% were managers, and 54% were exempt non-managers, or professionals. At the time of the survey, the population of managers in TRW was 10%, and professionals comprised 76% of the workforce. This means managers were over-represented, and professionals were under-represented in the sample. Because of this disparity, there are serious response bias issues, which may affect the generalizability of the results.

The acquisition of TRW by Northrop Grumman was not a surprise. Employees of TRW had over eight months to prepare for the change. According to the literature, once the acquisition is announced, and during the pre-acquisition phase, employees of both the acquired and the acquiring organization begin to develop a *future perfect* vision of what impact the acquisition will have on their personal lives (Cartwright & Cooper, 1993; Marks & Mirvis, 1998; Mirvis, 1985). This vision, or internal storyline, is an adaptive coping mechanism for the employee. Qualitative research supports the belief that the acquired employee population usually develops more robust internal story lines, since they are the ones who have the greater level of perceived “powerlessness” in regards to controlling the post-acquisition integration process (Mirvis, 1985). These internal stories alleviate the uncertainty associated with the post-acquisition transition process. This research is consistent with recent studies of children entering into new stepfamily relationships, who describe the same sense of loss of power during the initial stages of new stepfamily interactions (Murphy, 1998).

Through a combination of regression techniques, the data were analyzed to determine the influence on the different dispositional and demographic independent variables on the three-component commitment model.

**Research Question #1**

What pattern of scores on the commitment scales over three time periods are exhibited by a group of employees involved in a merger of two companies?

What I believe is happening is that the mean scores of the variables at T₁ reflect the last moment of a normal, or stable period of employee-organization linkages. Up through the point of the change of control, even though the organization was preparing for the change to a new operating culture, “TRW” was still a branded culture. Immediately after T₁, this began to change. As exemplified by the change in the organization title used during the T₂ and T₃ surveys, a new organization was being established. The creation of this new organization began the “un-anchoring” process for the acquired employees (with all due respect to Kurt Lewin).
Beginning at $T_1 + \text{one day}$, employees began experiencing the first steps of a transformational change process. This first step, described by Jack Mezirow (2000) as a “disorienting process” (p. 22), is now being experienced by the acquired employee sample. Other models of post-acquisition employee behavior subscribe to the belief that this stage is equivalent to the denial phase experienced in the Kubler-Ross model of personal bereavement (Mirvis, 1985). Another model views this period as similar to the sense of disorientation experienced by a step-child entering into a new stepfamily relationship (Murphy, 1998). The need for affiliation grows temporarily stronger during the first thirty days, as employees try to hold on to a dissolving culture (Cartwright & Cooper, 1996; Habeck et al., 2000). This short-term effect is demonstrated through a slightly elevated relationship between positive affect and EPAS on affective and normative commitment. The impact of the post-acquisition process on legacy affiliations may be slightly dampened by the sample demographics. The sample reflects an employee group with (on average) twice as many years work experience as company tenure. This means the employee would have work for at least one other employer prior to TRW. Employees who have experienced multiple employee-organization commitment cycles (either voluntarily or involuntary) are less likely to be affected by the uncertainty of subsequent cycles (A. Cohen, 1993, 2000).

The change displayed by the commitment variable relationships from $T_2$ to $T_3$ also opens the door to what I believe is a cognitive “turning-signal” for the employees within the legacy TRW organization. Mean scores for the three components of commitment are decreasing from $T_1$ to $T_3$, and while this decrease was shown to be overall statistically insignificant for affective commitment, there was a statistically significant change in means from $T_1$ to $T_3$. At times, the literature suggests that affective commitment has a certain predictive relationship on continuance and normative commitment. This is primarily due to the fact that the affective commitment scale is focused on maintaining alignment with organizational goals and sustaining membership, which are “future-focused” beliefs (Meyer et al., 2001; Morrow, 1993). Normative commitment and continuance are “present-focused” (Meyer et al., 2001; Morrow, 1993). Changes in affective commitment may, therefore, occur prior to changes in the other two components of the commitment model. The change in affective commitment may be a signal that there will be a significant decrease in the means for the other two components of commitment.

From thirty to sixty days after the change of control date, the acquired employees’ internal storyline is being challenged by the real-time post-acquisition integration activities. Beginning roughly thirty days from the change of control date, the employee begins to feel a disconnect between their internal story and what is happening in the workplace. For some, their belief in a specific future perfect state is being strengthened by certain organizational behaviors that are “story-reinforcing”. These behaviors may include participating in post-acquisition integration teams, whose inclusion may support the employee’s desire to be “in the know” (Mirvis, 1985). Others see their internal story slowly unraveling as changes in transactional organizational processes begin to challenge their belief that a desired future perfect state is still attainable.

At the sixty-day point, the nuanced signals of uncertainty are reverberating within the acquired employees’ cognitive framework. Disconnects between the internal storyline and workplace reality are becoming even more profound, and even those employees who initially thought
their storylines would remain intact are beginning to feel the pressure of a new cultural paradigm on their internal fabricated vision of a desired future state. The impact of these feelings of being disconnected is sometimes manifested in a reduced level of commitment to the organization (Marks & Mirvis, 1998; Schaeffer, 1999; Troiano, 1999). This is supported in the data. The mean scores for the three commitment scales are steadily declining from T1 to T3. Overall, the decrease in mean scores were not proven to be statistically significant from T1 to T2 and from T2 to T3. However, from T1 to T3 there was a slightly significant decrease in the affective commitment mean scores.

These mixed feelings, or ambivalence towards the organization, are also manifested in the compression of the standard deviation statistics for the emotion-focused commitment scales from T1 to T3. This ambivalence combined with the steadily decreasing mean commitment scores may be a symptom of the early stages of merger syndrome.

**Research Question #2**

To what extent are these patterns influenced by the organizational tenure and occupational status of group members?

Employees who responded to the survey had an average of 15 years of work experience, and 7.5 years of company service. Managers had an average of 8.8 years of company service and 21 yrs of work experience, while professionals had 7.5 years of company service and 13.8 years of work experience. The employees of TRW’s IT division are primarily project-based. These employees are recruited for their specific skills and competencies related to specific projects, most of which are government funded. The IT workforce is by nature migratory, moving from project to project. For the most part, this movement of employees is managed internal to the organization, but there are times when projects end, and there are no internal opportunities, resulting in layoffs. The very nature of the work ensures the possibility of forced turnover. Therefore, this particular type of workforce has a predilection towards employment that suffers from a higher frequency of turnover than other professions.

Given the tenure and work experience levels, there is a high likelihood that these employees have survived recent periods of forced turnover, and given their tenure, have chosen, for whatever reason, to remain in the field. This orientation towards employment has an impact on the depth and velocity of employee-organization commitment. With regard to the research question, both company service and years of work experience had an inconsistent and statistically insignificant influence on the affective and normative commitment scales. Company service and years in the workplace combined had a statistically significant influence on continuance commitment only at the change of control date, and weakened progressively from T2 through to T3. Occupational category had no consistently statistically significant relationship to the three commitment scales.

**Research Question #3**

To what extent are these patterns influenced by the level of positive affect and adaptive coping attributes of group members?
Positive affect (PA) had a statistically significant predictive value for both affective commitment and normative commitment. Positive affect’s influence on the emotion-focused commitment scales grew from T1 to T2, and declined slightly from T2 to T3. No statistically significant relationship was observed between PA and continuance commitment. Adaptive coping on its own provided no statistically significant influence on any of the three commitment scales, and only a slight (yet statistically insignificant) accretive value when combined with PA for the emotion-focused commitment scales.

The external business environment that existed during the period of time this study was conducted confounds continuance commitment results. Employee responses to the questions posed in the continuance scale are influenced by the perception of the market-value of their talents outside the organization. In this case, during the 60 days after the acquisition, the market for IT talent in North America was perceived to be fairly weak. Therefore, while employees were demonstrating ever-decreasing levels of employee-organization commitment, they had no alternative but to stay with the current organization. This conundrum could also explain why adaptive coping scores were inconsistent from T1 to T3.

Employees during this period of time are undergoing a level of stress both internal and external to the organization. Internally, the disorienting dilemma associated with the first steps of a transformational learning process is becoming a challenge to productivity. Externally, the market offers no opportunity for escape to a more stable work environment. Employees caught in this paradox may be documenting their frustrations through their inconsistent responses to the PFI at T3. At T1 the distribution of scores for the PFI which measures adaptive coping, switched from a unimodal to a bimodal distribution. This change was examined through an exploration of the influence of PA, NA and EPAS on adaptive coping scores. The data suggest employees are beginning to exhibit more maladaptive responses as the stress of the post-acquisition process creates a period of sustained uncertainty. This belief is supported through the literature, which states that individuals experiencing prolonged periods of stress may be overwhelmed, and begin to exhibit maladaptive behaviors inconsistent with their normally adaptive orientation (Folkman & Moskowski, 2000).

Research Question #4.
To what extent are these patterns influenced by the perception of success of the acquisition by group members?

The employee perception of acquisition success scale (EPAS) was created to measure perception of acquisition success. Because this scale was created specifically for this study, a factor analysis was computed for the scale at T1, T2 and T3. At T1, the EPAS loaded on three factors: (a) acquisition success, (b) communications, and (c) individual career success. At T2 and T3, the EPAS loaded on different factors. The fact that the EPAS loaded on different factors both with the original items, and with one item deleted (Item #4 was deleted in order to increase reliability) has massive significance. This change in factor loadings, even given the small sample size, indicates that there is a significant change in how employees are perceiving the success of the acquisition. Unfortunately, the significance in these changes cannot be adequately explored quantitatively, and would require a level of qualitative inquiry not supported by the host organization.
Nevertheless, the changing pattern does suggest that there is a continued level of dispersion and possible confusion about the outcome of the acquisition, and the possible impact of the acquisition on the survey participants. From T\textsubscript{1} to T\textsubscript{3}, the standard deviation of the EPAS scores increases slightly, attesting to the diffusion of beliefs regarding acquisition success. At T\textsubscript{3}, the EPAS scale shows a slightly bimodal distribution, which reinforces the belief that employees are beginning to experience a disconnect between their inner storyline and actual events. These diffusion of beliefs about the success of the acquisition are another symptom of merger syndrome.

One of the EPAS questions focused on employee perception of the financial success of the acquisition. From an economic perspective, one of the primary measurements of financial success is the positive change in the stock price of the acquiring organization. Actual closing bell prices for Northrop Grumman stock at (a) change of control date, (b) 30 days and (c) 60 days after change of control was compared to the three mean scores for each commitment scale. The end of trading day prices of Northrop Grumman stock were (respectively): (a) $96.50, (b) 98.05 and (c) 91.40. Since the stock held with the 90s range, only the last digit was used to compare the stock to the means. In addition, PA and EPAS means were also compared to see if there were any tacit trends. Figure 3 represents the bar graph comparison of these values. The stock market during the time of this study was experiencing an overall downward trend. Analysts viewed the lower stock price at February 11, 2003 more a condition of the market versus a reflection of any post-integration issues.

Figure 3. *Northrop Grumman Stock Price Vs. Commitment Scale Means*

![Bar graph comparison of stock price vs. commitment scales](image)

### Summary of Findings

Several symptoms of the early stages of merger syndrome are emerging from the interpretation of the data. Employees are experiencing a profound level of disorientation, resulting in steadily declining commitment mean scores. This dispersion is brought on by the lack of congruence between the employee’s internal future perfect storyline and the practical realities of the post-acquisition integration process. In effect, two things are happening. One, the employee is in a state of denial, either unwilling or unable to reconcile the realities of the acquisition with their internal storyline. And secondly, as a result of this disorientation, a feeling
of ambivalence towards the organization is being felt, with a heightened desire to flee, which was restrained by a soft employment market.

In terms of an experiential learning process, employees are still at the first state of the “disorienting dilemma” even up to 60 days after the acquisition. The bimodality of the adaptive coping scores coupled with the reduced EPAS mean scores are interpreted as being symptoms of a workforce in flux. Some employees have begun to accept their role in the new organization, and have reconciled their internal storyline to reality. Others are still struggling to align their internal belief system with the new organization. The difference in the speed and depth to which different employees travel along their separate learning journeys is manifested in the increasing dispersion of the EPAS and adaptive coping scores from $T_1$ to $T_3$ (as measured by the standard deviation statistic).

Merger syndrome has a powerful impact on employee-organization commitment and, when left unchecked, can effectively arrest employee-organization commitment during the post-integration period, and substantially lengthen the time required to build employee commitment to the new organization (Marks & Mirvis, 1998; Mirvis, 1985). Yet no matter how well prepared an organization is to handle the symptoms, the syndrome will always manifest itself to some degree during the post-acquisition integration period. What is necessary to mitigate the severity and duration of the syndrome is effective and well-developed HRD practices (Marks & Mirvis, 1998; Mirvis, 1985).

For the Northrop Grumman/ TRW post-acquisition integration process, these practices were in place. According to the legacy TRW HR leadership, human resources-related processes that: (a) mitigated the employee’s sense of disorientation, and (b) facilitated the remaining components of the learning journey, were in position five days after the acquisition. In addition, functional post-acquisition integration teams were also activated immediately after the change of control date.

These processes have been theorized as effective mitigators of low productivity after an acquisition (Marquardt, 1998; O’Brien, 1992; Risberg, 2001; Schein, 2000; Troiano, 1999). In the case of the Northrop Grumman/TRW acquisition, during the first 90 days of the acquisition integration teams had focused primarily on transactional efficiencies. Northrop Grumman human capital assessment teams had been working to determine operational efficiencies created by the acquisition. At the time of this dissertation, the results of these integration teams had not been divulged. It is assumed that employees of the legacy TRW organization are aware of the mission of ongoing assessment and transactional process consolidation teams, which is to create organizational efficiencies. Some of these efficiencies may be perceived as having a negative impact on the legacy TRW work force. The anxiety associated with not knowing the outcome of these post-acquisition integration teams may be contributing to the mixed results from the surveys.

Open and sustained communications processes are considered critical to ensuring employee-organization commitment during the post-acquisition time period (Paige, 1999). For the TRW acquisition, leadership communication processes during the post-acquisition time period have focused initially on the status of transactional-based integration projects.
Transformational, or value-alignment communications will be delivered once the assessment and transactional efficiency teams have delivered their recommendations.

Internal post-acquisition integration process issues, combined with a tight labor market, have provided a complex context for this study. The employees’ reaction to the changes in both the organization and the marketplace are visible in the survey results. On one hand, during the first 60 days after the acquisition, employees are indicating a strong linkage between perception of acquisition success and positive affect. Employees believe there is a strong expectation of success for the acquisition. On the other hand, emotional commitment to the organization is beginning to decline, as the chaos and stress of the post-integration processes begin to wear on the employee’s ability to cope with the change. Adding to this internal stress is the tension being experienced in the external job market at the time of the study. This external stress, manifested through a limited hope of finding employment, confounds the employees’ desire to escape a stressful change process.

**Recommendation for Practice**

Employee-organization commitment is critical to the success of an acquisition (Bourantis & Nicandrou, 1997; Buono et al., 1985; Buono & Nurick, 1992; Cartwright & Cooper, 1993; DelVecchio, 1999; DeVoge & Spreier, 1999; Gandossy & Jeffay, 1995; Hickins, 1999; Hilborn et al., 1999; Kramer, 1999; Krell, 2001; Mirvis, 1985; Villinger, 1996; Viscio et al., 1999; Weber, 1996). Facilitating this commitment is a role shared by organizational leadership and HRD practitioners (Gilley & Maycunich, 1998; Ulrich, 1997).

This commitment facilitation process requires the HRD practitioner to support an employee through a transformational learning journey which is similar in emotions to: (a) marriage (Cartwright & Cooper, 1996) or re-marriage (Murphy, 1998), (b) separation anxiety (Astrachan, 1995), (c) the Kubler-Ross bereavement model (Broussseau, 1989; Mirvis, 1985; A. Schwieger et al., 1987), and (d) grieving for the loss of a significant other, which is a situation-based adaptation of the Kubler-Ross model (Newman & Krzystofiat, 1993). To support the facilitation of the employee’s journey to commitment after an acquisition or other similar types of organizational change, HRD practitioners must also have an understanding of the attributes and success factors of individuals who have successfully completed transformational journeys in other contexts.

Through this study, HRD practitioners now have an additional understanding of what dispositional and demographic attributes influence employee-organization commitment. Positive affect had been theorized as a possible antecedent to commitment (Agho et al., 1993; Meyer et al., 2001), but had never been explored as an influence on commitment during a period of organizational change. The ability to support a problem versus an emotion-focused approach to coping is shown to erode slightly during the 30 to 60 day period after the acquisition. Through this study, positive affect has been shown to have an influence on the emotional-focused commitment scales of affective and normative commitment. The demographic variable of company tenure has also shown to have a slight influence on continuance commitment immediately after the change of control date.
The results of this study, combined with several other studies of employees experiencing a post-acquisition commitment journey, support the belief that an employee’s “future-perfect” orientation is important to completing the commitment journey (DelVecchio, 1999; Ozag, 2001). Future perfect is an employee’s perception of an ideal state, or what “should be” with regards to an ideal organization (Weick, 1979). This concept of future perfect is derived from Marvin Weisbord’s dialogue on the creation of future search conferences, which attempt to identify the attributes of a future perfect organization (Weisbord, 1991). Supporting the notion of future perfect are the underlying psychological structures of expectation and hope (Lewin, 1951).

According to Kurt Lewin (1951):

- **Expectation** refers to the psychological structure and the distribution of forces on the reality level of the psychological future.
- **Hope** refers to a relation between the structure of the reality level and of the wish level of the psychological future. (p. 40)

This belief is also supported by the positive relationship between the employee’s perception of acquisition success and positive affect, which in this study remained significant over the entire 60 day time period. A recommendation for practice is a further exploration of why employees feel the need to create a future perfect internal storyline in order to cope with the affects of an acquisition.

HRD practitioners can have an impact on the success of an acquisition through the creation and implementation of strategic communication processes that reinforce the employee’s positive perception of acquisition success (Fitzgerald, 2002). The literature support the belief that open and forthright communications from organizational leadership (Daniel & Metcalf, 2001), immediate supervisors (Bouwen & Overlaet, 2001), customers and peers (Bates, 2002) fosters a sense of well-being and hope in employees experiencing a post-acquisition journey to commitment (Kramer, 1999; Paige, 1999).

In concert with the creation of a future-perfect view of the acquisition, HRD practitioners can also have an impact on the reinforcement of positive-affect related behaviors. For example, proactive personality, which has been identified as a positive-affect related behavior (Crant & Bateman, 2000), has been shown to be a positive influence on individual success (Crant, 1995, 1996). Through the use of action-learning processes, employee-organization commitment can be stimulated, reinforcing employee-organization linkages (Marsick, 1990).

Leaders of organizations completing the post-acquisition integration process now have a limited level of empirical evidence to support the belief that the post-acquisition integration period requires a great deal of attention be placed on facilitating an employee’s ability to sustain a problem-focused coping orientation. The facilitation of this problem-focused orientation is important to ensure the acceleration of employee commitment to a new culture. Employees need to be courted (Paterson, 2000), and encouraged to view the commitment to a new organization as a positive, and evolutionary step in their development (Lucas, 1999; Marquardt, 1998; Paterson, 2000).
Limitations

This study has several limitations. The first limitation is that the sample was not randomly selected. In order to meet the requirements of the study, an organization was chosen based on (a) change of control date, and (b) access to a sample population. Therefore, this limits the generalizability of the study due to the homogenous nature of the sample group. This study was accomplished during the 60-day period immediately following the actual change of control date for an acquisition. The temporal limitations of the study bind the generalizability of the findings to a specific, post-acquisition time period.

Another limitation to generalizability is the unique relationship in the sample group between company service and years in the workforce. Due to the project-based work of the employing organization, there was not a high correlation between company service and total years of work. This type of employee population, while typical for the defense industry, is atypical as compared to traditional manufacturing organizations.

The view that some employees viewed the employee survey as an assessment process should also be considered when evaluating the results of the survey data. Given the anxiety and stress demonstrated by non-respondents to the survey, it should be assumed that respondents felt similar uncertainties, which may have influenced their responses. Even though there was an attempt to ensure complete anonymity, there may have been some response bias.

The small sample size is another limitation. Initially, over 170 employees were contacted to participate in the study. Ultimately, 51 completed the journey. This is a 30% response rate. A number of reasons have been given for this low response rate, to include (a) lack of incentive to complete the survey, (b) the timing of the survey, and (c) the perception that the survey was an assessment vehicle. The scales used in the survey were not specifically designed or adapted to compensate for the unique characteristics of the study. Indeed, the results of the response to the PFI at T3 demonstrated how fragile these instruments are when used to measure employee attributes during a period of stress.

Given the above explanations, the outcomes of this study should be viewed as a first step in the exploration of antecedents to post-acquisition commitment. Casual relationships explored in this study should not be viewed as conclusive.

Recommendations for Future Research

The pace of acquisitions and mergers is increasing (Hamel, 2000). So too is the expected financial return (Galpin & Henderson, 2000). This economic return hinges on the effectiveness of human capital in the newly merged organization achieving a necessary level of value-creation equal to or greater than expected by stakeholders. Antecedent to this value creation process is the forging of employee-organization linkages that reinforce employee commitment to the new enterprise. This study explored only two dispositional and three demographic antecedents to employee-organization commitment. Other recent studies have examined different antecedents, such as: (a) trust and hope (Ozag, 2001), (b) employee attitudes (Singh, 1999), and (c) job satisfaction (DelVecchio, 1999). Subsequent research needs to examine whether these attributes are related to the findings in this study, and determine if there are additional linkages between these attributes.
A second recommendation concerns the exploration and identification of additional dispositional variables that are antecedent to employee-organization commitment. From a practitioner’s perspective, there is a need to understand what dispositional attributes predict not only employee-organization commitment, but also the related venues of employee-supervisory, team, peer and customer commitment. Other employee-organization linkage measures, such as job satisfaction and intention to quit would also benefit from the identification of dispositional attributes.

Research needs to be employed that examines not only the period of time immediately after the acquisition, but also what happens to employee commitment after the first 60 days following the acquisition. What I believe I have identified in this study is the partial nature of the acquired employee’s first step in the process of committing to a new culture. According to the literature, this transformational learning journey takes longer than 60 days (Cartwright & Cooper, 1996; Douglas, 2000; Schaeffer, 1999). It would be interesting to re-survey the sample at 180 days and one year after the change of control date.

A more robust instrument needs to be developed which expands on the EPAS scale developed for this study. Perception of success, or of a future perfect state is emerging in the literature as a related construct to hope and expectation. More work needs to be accomplished that determines the influence of an employee’s perception of a future state on employee-organization commitment. In addition, a methodology needs to be developed to modify existing dispositional measurement scales for employment in measuring their respective attributes during a period of change. This “hardening” of dispositional scales may prevent the distortion of responses. This hardening process may include the testing of these instruments with sample respondents who are enduring a period of organizational chaos, and determine from the subsequent reliability analyses, which attributes of the measure can sustain consistent results during the “white water” of change.

Further research needs to be developed which examines the influence of gender and cultural orientation on post-acquisition commitment. Given that more mergers are being completed on a global basis (Hamel, 2000), it will become increasingly necessary to understand the unique influences of culture on post-acquisition commitment. Our workforce is also becoming more diverse from a gender perspective. And while current literature has not yet explored the possible differences (if any) between the genders when it comes to employee-organization commitment, it would be interesting to see if there are differences, and how these differences influence the depth and velocity of commitment to a new, post-acquisition organization.

This study has attempted to employ a quantitative approach to the study of employee-organization commitment after a business acquisition. In future studies, a quantitative approach should be used to gain an initial understanding of the interactions between dispositional, demographic and commitment variables. Using these interaction statistics as a base, a more involved qualitative approach should be employed to probe into the complexities and chaos surrounding an employee’s journey to commitment.
Conclusion

Current theory holds the belief that highly committed employees are critical to ensuring the success of an acquisition or merger. Gaining employees’ commitment requires an understanding of the underlying antecedents, and the unique contributions of these antecedents to the commitment process. The challenge for employers during the period of post-acquisition integration is mainly one of ensuring sustained linkages to the enterprise. During this period of chaos and stress, employees need continuous and positive support from their peers, their leadership and the human resource development practitioners.

Building a new, post-acquisition organization requires employees to share the values of the new enterprise and believe in the mission of the organization. This, in turn, requires employees to complete a transformational learning journey, one that begins with a sense of disorientation and loss, and ends with a re-anchoring in a new culture. This study has explored the first steps of this journey. During this exploration, the complex inter-relationships between dispositional factors, demographics and employee-organization commitment were observed. It was found that there is a link between positive affect and the emotion-focused commitment scales, and another link between company tenure and continuance commitment.

It was fascinating to explore the changing face of commitment during a period of organizational change. This study provided a unique opportunity to test a conceptual model in a real-life setting. The supposed “soft-side” of mergers and acquisitions proved to reflect some very hard realities. According to Sue Cartwright (Cartwright & Cooper, 1996):

The role of people in determining merger and acquisition outcomes is in reality not a soft, but a hard issue. Without the commitment of those who produce the goods and service, make decisions and conceive strategies, mergers and acquisitions will fail to achieve their synergizing (sic) potential as a wealth-creating strategy (p. 161).
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