

UNDERSTANDING EXECUTIVE TURNOVER: EXECUTIVE PERFORMANCE  
AND ECONOMIC CHANGES

by

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## ABSTRACT

HEATHER LYNN GORDON. Understanding executive turnover: Executive performance and economic changes. (Under the direction of DR. ERIC D. HEGGESTAD)

Previous studies examining the predictors of turnover have focused on lower-level employees rather than executives in the upper-ranks of the organization. The few studies that have examined executive turnover have failed to differentiate turnover that results from individual decisions (i.e., voluntary turnover) and organizational decisions (i.e., involuntary turnover). Applying Crossan, Vera, and Nanjad's (2008) transcendent leadership framework and a new moderator variable I call "recession awareness", the current study explores the relationships of executive performance and economic changes with executive-level voluntary and involuntary turnover. Using a sample of 523 executives in a large financial institution over an 18 month period, the present study attempted to: (1) analyze the relationships between executive performance and turnover, both voluntary and involuntary, and (2) to investigate changes in the relationships between these variables across different economic situations. While the study suffered from measurement issues which inhibited the interpretation of analyses, a consistent negative relationship was found between executive performance and involuntary turnover. In addition, some initial support was provided for the use of recession awareness as a moderator for the relationship of executive performance and turnover. The implications of these findings and suggestions for future research are discussed.

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## DEDICATION

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## INTRODUCTION

Across multiple disciplines in the organizational sciences, researchers have investigated the causes and consequences of turnover for lower to mid-level employees (Barrick, Mount, & Strauss, 1994; DeCocinck & Stilwell, 2004; Knudsen, Ducharme, & Roman, 2009; Steel & Lounsbury, 2009). Within the voluntary turnover literature, research has shown that individual performance (Allen & Griffeth, 2001; Bycio, Hackett, & Alvares, 1990; Dreher, 1982; Jackofsky, 1984; Lance, 1988) and labor market conditions (Carsten & Spector, 1987; March & Simon, 1958; Mobley, Griffeth, Hand, & Meglino, 1979; Muchinsky & Morrow, 1980; Steers & Mowday, 1981) are key drivers of such employee turnover. While there has been less focus on understanding involuntary turnover, research on this topic has consistently demonstrated a negative relationship between job performance and involuntary employee turnover (Barrick et al., 1994; Bycio et al., 1990; LaRocco, Puch, & Gunderson, 1977; Stumpf & Dawley, 1981; Wanous, Stumpf, & Bedrosian, 1979; Wells & Muchinsky, 1985). The consequences of both voluntary and involuntary employee turnover can be substantial for organizations, particularly in terms of the money and time spent on the recruitment, selection, and training of new employees (Sightler & Adams, 1999).

Interestingly, much less attention has been given to the causes of turnover for individuals in executive-level positions. This lack of research is surprising since the turnover rate for executives is relatively high, with an average of 30% to 50% of executives leaving an organization in a given year (Howard, 2001). In addition, the costs associated with executive turnover can be particularly devastating to organizations, with estimates as high as \$2.7 million dollars for replacing a departed executive (Abbasi &

Hollman, 2000; Muchinsky, 1997). Beyond the direct costs, executive turnover has been found to create turmoil among remaining employees, leading to numerous uncertainties about the future of the organization (Knudsen et al., 2009).

It is perhaps because of these potential negative impacts that what little literature that exists on executive turnover has focused on the consequences of that turnover rather than its antecedents (Harrison, Torres, & Kukalis, 1988). Research on the antecedents of executive turnover has generally been limited to the strategic management field. While this research has provided some valuable insight into some of the reasons for executive turnover, there appear to be at least three key weaknesses within this literature base. First, the majority of these studies have concentrated on the relationship of executive turnover with archival measures of organizational-level variables, including organizational size, demography, and performance (Fee & Hadlock, 2003; Jackson et al., 1991; Wagner, Pfeffer, & O'Reilly, 1984). This research has generally not examined how individual characteristics are related to turnover in executive level positions. Second, these studies have rarely examined how economic conditions and labor markets impact individual and organizational decisions regarding executive turnover (for an exception see Wagner et al., 1984), even though research has shown such environmental changes greatly impact turnover decisions among lower level employees (Barrick et al., 1994; Carsten & Spector, 1987; March & Simon, 1958; Mobley et al., 1979; Muchinsky & Morrow, 1980; Steers & Mowday, 1981). Third, researchers have primarily measured turnover as the proportion of executive level departures from the organization, rarely distinguishing between involuntary and voluntary turnover. Since the causes and consequences of voluntary and involuntary turnover are likely to be quite different, research is needed that

distinguishes between the two types of turnover at the executive level (Shaw, Delery, Jenkins, & Gupta, 1998). Therefore, the current study aims to fill these current gaps in the literature by analyzing the relationships among performance behaviors and executive-level involuntary and voluntary turnover. In addition, this study also investigates the relationships between these variables when a situational variable called recession awareness, or an event where the public becomes aware and understands that a recession is occurring, moderates the relationship.

### Understanding Executive Performance

Research on non-executive turnover has demonstrated that job performance is an important predictor of both voluntary and involuntary turnover (Allen & Griffeth, 2001; Barrick et al., 1994; Bycio et al., 1990; Dreher, 1982; Jackofsky, 1984; Lance, 1988; LaRocco et al., 1977; Stumpf & Dawley, 1981; Wanous et al., 1979; Wells & Muchinsky, 1985). However, the performance requirements and responsibilities of executives are likely quite different from performance of lower level employees. As such, when studying executive turnover and job performance, it is first necessary to understand the unique responsibilities and performance expectations for executives.

#### *Performance at the Executive Level*

Executives typically work within an unstructured and uncertain environment where cognitive and behavioral complexity is necessary for successful performance. They are expected to not only manage organizational members but also lead and inspire them to accomplish collective organizational goals (Zaccarro & Kliminski, 2001). Executives must be able to quickly address, process, and interpret complex information in order to make strategic decisions, while also effectively interacting with and integrating

multiple organizational units and members. According to Hambrick, Finkelstein, and Mooney (2005), such complexity in both environment and responsibility is what makes the work at this level of the organization “qualitatively different from work at other organizational levels” (pg. 475). In an attempt to demonstrate the differences among the responsibilities and performance of executives, Katz and Kahn (1978) specified three patterns of leadership divided by organizational level. According to Katz and Kahn (1978), individuals at the executive level of the organization create organizational structure, formulate policy, and develop corporate strategies. Middle level leaders interpret and elaborate such structure and strategies, and lower level leaders administer these structures and strategies. Jacobs and Jacques (1987) also maintained that there are three domains of organizational leadership with the top domain consisting of executives, vice presidents, and CEOs. At this executive level, leaders are responsible for structural change and boundary spanning. In addition, they must create broad social networks to ensure availability of needed resources and must establish a corporate culture that will support the goals of the organization (Jacobs & Jacques, 1987). The perspectives of both Katz and Kahn (1978) and Jacobs and Jacques (1987) suggest that what makes the executive role unique is both the complexity of their performance and responsibilities and the environments in which they operate.

### *Transcendent Leadership*

Transcendent leadership (Crossan, Vera, and Nanjad, 2008), a more recent framework for explaining the unique performance requirements and responsibilities of executives, explicitly recognizes the dynamic environment within which executives operate. This framework extends previous attention on the leadership of others (i.e., the

dyadic influence) by adding two other key responsibilities of strategic leaders: leadership of the organization and leadership of self. Only when an executive leader displays all three categories is the executive considered a transcendent leader. By breaking down executive performance into these three categories, Crossan et al. demonstrate the complexity and uniqueness of performance at the executive level.

*Leadership of Others.* In defining each of their three key leadership performance indicators, Crossan et al. (2008) relied on existing theories of leadership. For leadership of others, Crossan et al. (2008) referenced the theories of transformational and authentic leadership. They stated that a transcendent leader who is responsible for leading others must demonstrate transformational leadership qualities to move the follower beyond self-interest to self-actualization through the four components of charisma, inspiration, intellectual stimulation, and individual consideration (Bass, 1985). They argued that transformational leadership theory fits within their dynamic framework, as research has demonstrated that transformational leaders are most effective in both crisis (Osborn, Hunt, & Jauch; 2002) and dynamic situations (Smith, Monagno, & Kuzmenko, 2004). Authentic leadership, described by Luthans and Avolio (2003) as a process “which results in both greater self-awareness and self-regulated positive behaviors on the part of leaders and associates, fostering positive self-development” (p. 243), also fits within category of leadership of others due to the authentic leader’s need to be self-aware and understand how others perceive them (Avolio, Luthans, & Walumbwa, 2004; Luthans & Avolio, 2003). As Crossan et al. (2008) argued, “with organizations of all types experiencing unprecedented levels of change, a portfolio of transformational and

authentic leadership behaviors is instrumental for strategic leaders in leading others in highly dynamic contexts” (p. 575).

*Leadership of Self.* Crossan et al. (2008) stated that leadership of the self requires one to actively develop oneself and to have high levels of cognitive, behavioral, and moral complexity. Leadership of the self necessitates not only this need for personal complexity, but also an acute self-awareness and self-regulation. Individuals high in this quality also have high leadership strengths such as humanity and temperance. Of the three categories, leadership of the self is the most internally focused and least defined of Crossan et al.’s framework.

*Leadership of the Organization.* Crossan et al. (2008) argued that dynamic environments necessitate a strategic leader who is capable of leading certain non-human elements including organizational strategy, structure, rules, and procedures. They reasoned that leadership of the organization requires a leader to be flexible and able to make sense of the changing environment. This type of leader must not only be receptive to external changes but also manage these changes in a manner that will set boundaries for organizational strategies. Crossan et al. suggested that it is the inclusion of leadership of the organization that sets their framework apart from other existing leadership theories and is also a unique aspect of executive performance. In other words, a central piece of an executive’s job that is unique to their level is ability to match organizational strategy and structure to environmental demands (i.e., leadership of the organization).

#### Transcendent Leadership Performance Categories and Executive Turnover

Research has shown that executive turnover, measured as the proportion of executives leaving an organization, is related to lower organizational performance (Fee &

Hadlock, 2000, 2003; Harrison et al., 1988; Potter & Dowd, 2003; Wagner et al., 1984; Weiserma & Bantel, 1992), greater dissimilarity of demographic variables among the executive level team (Wagner et al., 1984; Weiserma & Bantel, 1992), changes in the external environment (Potter & Dowd, 2003; Weiserma and Bantel, 1992), and CEO succession and departure (Shen & Cannella, 2002). Studies linking different variables to executive turnover have all suffered from the same issue: failing to distinguish involuntary and voluntary turnover. As a result, the literature is less sophisticated as it could be, and likely should be given the important differences between the types of turnover. Whereas empirical support is found for the influence of individual performance and economic shifts on turnover for employees in lower-level positions (Allen & Griffeth, 2001; Barrick et al., 1994; Bycio et al., 1990; Carsten & Spector, 1987; Dreher, 1982; Jackofsky, 1984; Lance, 1988; LaRocco et al., 1977; March & Simon, 1958; Mobley et al., 1979; Muchinsky & Morrow, 1980; Steers & Mowday, 1981; Stumpf & Dawley, 1981; Wanous et al., 1979; Wells & Muchinsky, 1985), executives in the upper levels of organizations likely face unique demands and situations where the influence of such variables may be more complex than at lower levels. By using transcendent leadership as a framework for executive performance, the current paper aims to help explain the relationships of performance- and economic-related variables with voluntary and involuntary executive turnover.

### *Performance and Executive Turnover*

*Leadership of Others.* The executive level position requires leaders to operate in a socially complex environment where they must motivate and integrate multiple different employees and units. In order to succeed in such an environment, executives must

develop and support large social networks (Zacarro & Klimoski, 2001). Crossan et al. (2008) claimed that if a strategic leader excels at leadership of others then he or she will demonstrate transformational behaviors and have a wide array of relationships with not only their followers but also superiors, peers, and external constituencies. A study by Bono and Anderson (2005) found that managers who score higher on such transformational leadership qualities tend to hold more central positions in advice and influence within social networks and are able to acquire more social capital (Bono & Anderson, 2005; Burt, 1997). According to Brass (2001), social capital “refers to social relationships that can potentially confer benefits to individuals and groups” (p. 133). Burt (1997) writes about the benefits of social capital and claims that the resulting social networks from having social capital act as tools for gaining important information. Burt ascertains that because individuals have limited information processing capabilities, network relationships provide the access to information others’ possess, such as information about a job opening at another company. Executives who have strong social capital and social networks can also benefit from receiving job referrals; personal contacts from the networks can refer the executive to others and can provide references for the executive.

I believe it is these networks of relationships that provide the opportunities and constraints that may be a causal force for executives in voluntary turnover. I propose that leaders who excel at leadership of others will have stronger relational networks both within and outside the organization. These social networks will then provide the leader with more job opportunities and access to important career management information and

opportunities (Bono & Anderson, 2005). As such, these individuals will be better equipped to find alternative employment.

*Hypothesis 1:* Executives who are high in leadership of others will be more likely to leave the organization voluntarily.

Conversely, when an executive is low on leadership of others, they will not have the social capital to help them find out about potential job openings and alternative employment. They will also not have the buy-in and the internal relationships needed with followers, supervisors, and other stakeholders that will help the executive keep his or her job at the organization. As such, they will be more likely to be dismissed from the organization.

*Hypothesis 2:* Executives who are low in leadership of others will be more likely to leave the organization involuntarily.

*Leadership of Self.* A strategic leader who excels at leadership of self is self-aware and has skills in self-regulation (Crossan et al., 2008). While leadership of others and leadership of the organization are performance aspects that are readily apparent to others outside the individual, leadership of the self is more of an internal performance quality and is not as easily assessed by outsiders. As this is the most internal aspect and least defined of Crossan et al.'s (2008) framework, I do not believe this performance category will be related to voluntary or involuntary turnover. In addition, while leadership of others and leadership of the organization are defined with a specific focus on the responsibilities at the executive level, leadership of self is a category that could transcend all levels within the organization. As such, no formal hypotheses are offered for leadership of the self and turnover.

*Leadership of the Organization.* According to Crossan et al. (2008) the leader who demonstrates organizational leadership will be able to manipulate the structure, resources, and strategy of the organization in order to produce organizational benefits and performance improvements. Crossan et al. (2008) argued that any time leaders excel at leadership of the organization it will result, at least in the short term, in high organizational performance regardless of their abilities to lead the self or others. Research has shown the importance of executive leadership in monitoring external changes and creating a strategic fit of the organization with the environment (Romanelli & Tushman, 1988). Since organizations are economic institutions that must make a profit and acquire resources, they value executives who demonstrate high fiscal acumen, the ability to manage risks, and the competence to make strategic decisions to help meet financial demands (Hubbard & Palia, 1995). In order to accomplish these financial goals, organizations seek to recruit and retain executives who are good at leadership of the organization. In addition, as Geletkanycz and Hambrick (1997) argue, “the ability of executives to formulate and implement strategic initiatives that capitalize on environmental opportunities, while mitigating external threats, is vital to organizational success” (p. 654), organizations will be more likely to highly compensate such executives leading to a decreased desire to leave the organization. Therefore, I contend that leadership of the organization will be negatively associated with voluntary turnover (i.e., those with lower levels of leading the organization will be more likely to voluntarily leave the organization) because organizations will highly reward and thus, retain those executives who are effective in activities associated with leading the organization.

*Hypothesis 3:* Executives who are high in leadership of the organization will be less likely to leave the organization voluntarily.

Equally important, I believe organizations will be more likely to terminate those executives who are unable to lead the organization. When executives are unable to strategically structure and align the organization, they will not be able to meet the fiscal requirements of the organization. As Zaccaro and Klimoski (2001) argue such a financial imperative “is perhaps the most fundamental source of pressures on senior organizational leaders” (p. 29). With respect to Crossan et al.’s (2008) leadership framework, I argue that organizations will be more likely to dismiss leaders who are low in leadership of the organization because these leaders will demonstrate an inability to align the strategy to organizational outcomes which may lead to organizational challenges. Therefore, I predict that leaders who are low in leadership of the organization will be more likely to be involuntarily dismissed from the organization.

*Hypothesis 4:* Executives low in leadership of the organization will be more likely to leave the organization involuntarily.

#### *Economic Changes and Executive Turnover*

The National Bureau of Economic Research (NBER) defines a recession as “a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales” (Leamer, 2008, p. 6). As demonstrated by previous research investigating economic determinants of turnover (Carsten & Spector, 1987; Michaels & Spector, 1982; Steel & Ovalle, 1984), such situational changes can strongly impact an individual’s decision to leave an organization. Likewise, companies

may look at employee performance differently during economic changes and dismissal decisions may change based on these evaluations. When a recession first begins, individuals and organizations usually fail to recognize that it is occurring, and oftentimes, the stock market will not be impacted until it has been in effect for some longer period of time (Bordo, 2008). While previous research has demonstrated how actual labor-market conditions will affect an individual's decision to leave the organization and an organization's decision to dismiss employees (Barrick, et al., 1994; Carsten & Spector, 1987; Michaels & Spector, 1982; Steel & Ovalle, 1984), very little research has investigated the impact of how perceptions or awareness of economic conditions will impact turnover decisions (Gerhart, 1990). As both employee and organizational turnover decisions are likely driven by reactions to the awareness of an economic downturn, considering recession awareness as a moderator of the relationship between performance and turnover is important.

Officially starting in December 2007, the United States experienced a financial downturn leading to a large-scale recession with comparisons to the Great Depression in 1937 (Bordo, 2008). As is typical of recessions, most people were not aware that the economy was in recession until well after it began. The gravity of the economic situation appears to have permeated public awareness in mid-September 2008. On the 16<sup>th</sup> of that month, Lehman Brothers, one of the world's largest investment banks collapsed into bankruptcy. On September 16 the Standard & Poor's 500 Index experienced the steepest drop since the terrorist attacks of September 11, 2001 (Thomasson & Stanton, 2008), and that same day the Dow Jones Industrial Average fell 504.48 points, or 4.4% (Thomasson & Stanton, 2008). According to a New York Times article by Becker, Stolberg, and

Labaton (2008), during a meeting of the White House economic team on September 18, 2008, Benjamin S. Bernake, chairman of the Federal Reserve, relayed the news to President Bush that “the credit markets, gripped by panic, had frozen overnight, and banks were refusing to lend money” (p. A1). Becker et al. (2008) also reported that the Treasury Secretary, Henry M. Paulson Jr., relayed to President Bush that “to stave off disaster, he would have to sign off the biggest government bailout in history” (p. A1). According to economist Tony Plath “After the meeting, several of the Senators in attendance mentioned how that particular meeting changed their view on the severity of the then-current economic downturn, which later influenced their vote to approve the TARP spending bill in late 2008” (T. Plath, personal communication, January 4, 2010). In the eight months after September 2008, the unemployment rate rose 3.2 percentage points to 9.4 percent which was the largest increase over such a period since the 1973-75 recession (Norris, 2009). Given these very high profile events, it could be argued that September of 2008 marked a point at which organizations and the general public became acutely aware of the recession and its magnitude. This situation is likely to be especially true within the financial industry, as it was this industry that was seen as a key cause of the recession and needed government support to keep from fully collapsing. To examine the impact of the economic situation on turnover decisions, I define a categorical variable of Recession Awareness. Pre-recession Awareness involves time up to September 2008 and represents a situation characterized by no or less heightened concern over economic conditions. Post-recession Awareness includes time after September 2008 and represents a situation characterized as heightened concern over systemic economic issues. The

following hypotheses are proposed regarding the situation's impact on the relationship between performance and executive turnover.

*Leadership of Others.* As argued previously, executives who have stronger relational ties outside the organization will have greater knowledge of employment alternatives. This knowledge will increase the executive's ease of movement and ability to leave the organization, leading to a positive relationship of voluntary turnover and leadership of others. During times of economic change, these external networks will become even more important and those who have such networks will be able to obtain employment at other organizations. Therefore, I believe that there will be a stronger relationship between leadership of others and voluntary turnover during the post-recession awareness timeframe.

*Hypothesis 5:* Recession awareness will moderate the relationship between voluntary turnover and leadership of others, such that the positive relationship will be stronger in the post-recession awareness timeframe.

As previously hypothesized, when a leader is low on leadership of others, they will be more likely to be dismissed from the organization due to not being part of the internal social network. This effect will be exacerbated during times of economic instability when more organizational decisions are being made to dismiss and layoff executives in order to save costs. I hypothesize that those executives who do not have strong relationships developed within the organization will be more likely to be dismissed in the post-recession awareness timeframe because they will lack other organizational member support.

*Hypothesis 6:* Recession awareness will moderate the relationship of involuntary turnover and leadership of others, such that the negative relationship will be stronger in the post-recession awareness timeframe.

*Leadership of the Organization.* I previously hypothesized that leadership of the organization will be negatively related to voluntary turnover due to a focus on keeping and rewarding those individuals who excel at leadership of the organization. However, executive turnover has been found to increase when there are drastic declines in organizational performance, such as during times of a recession (Wagner et al., 1984). When the economy changes and organizational performance suffers, I expect executives with high levels of leadership of the organization to be more likely to voluntarily quit than in previous times. First, executives high on this attribute will be more likely to comprehend the current financial environment and will compare the performance of their organization relative to other companies (Frank, 1985). Second, as Chermie et al. (2007) argues, once the higher performing organizations are identified, these executives will likely seek employment at the identified companies in order to obtain the high salary, rewards, and status they desire. Finally, during such situational changes, executives who are high in leadership of the organization and capable of “interpreting the environment, crafting strategy, and building an organization” will most likely be highly sought after from competing and better-performing organizations and capable of gaining employment elsewhere. Therefore, I believe that when executives are aware of the recession those who are high in leadership of the organization will be more likely to voluntarily quit than before they were aware of the recession.

*Hypothesis 7:* Recession awareness will moderate the relationship between voluntary turnover and leadership of the organization, such that the relationship will be negative in the pre-recession awareness timeframe and positive in the post-recession awareness timeframe.

In Hypothesis 4, I suggested that organizations will be more likely to dismiss those executives who are unable to fit the organizational strategy and structure to situational changes. A study by Hubbard and Palia (1995) found that as the competitive market increases for organizations, executives will either “have to perform or be fired” (p. 110). Therefore, as organizational performance becomes more of an issue of survival, organizations will be more likely to dismiss executives low in leadership of the organization during these times of low organizational performance.

*Hypothesis 8:* Recession awareness will moderate the relationship between involuntary turnover and leadership of the organization, such that the negative relationship will be stronger in the post-recession awareness timeframe.

## METHOD

### Context and Sample

#### *Organizational Context*

The current study uses a sample of executives from a large Fortune 500 financial institution. Financial institutions have been seen as a primary cause for the recession which began in late 2007, largely due to the lending of sub-prime loans and Collateralized Debt Obligation (Soros, 2008). Due to the scrutiny of their poor performance as it impacted not only their key stakeholders but also the success of both national and international markets and economic growth (Staw, Barsade, & Koput, 1997), the FDIC reported a total of 165 bank failures in 2008-2009 (FDIC, 2010). As such, these institutions provide an interesting platform for investigating executive turnover in the context of changing economic conditions.

#### *Sample*

Data for this research were gathered from archival personnel records located in the organization's corporate headquarters. The sample in this study included executive-level employees in the top two tiers (immediately below the Chief Executive Officer) of a large public financial corporation. All major business functions were represented within the sample, which include such functions as consumer and business banking, credit card services, and home loans and insurance.. Complete data were available for 528 of the 645 (82%) individuals at these levels of the organization (117 individuals did not have performance rating information). Executives for whom performance data were not available did not differ significantly on demographic variables from those for whom data were available. An additional five individuals were excluded from the analyses because

they were classified as Retired and it was unclear if their retirement was voluntary or involuntary. Thus, in all, the sample consisted of 523 executives. With regard to demographic information, 78% were male, and most were identified as White (86.4%). Other ethnicities represented in the sample included Black or African American (3.4%), Hispanic or Latino (2.7%), Asian (3.6%), and American Indian or Alaska Native (0.4%) (ethnicity information was not available for 2.9% of the sample). On average, sampled executives had an organizational tenure of 14.92 years ( $SD = 9.06$ ).

### Measures

#### *Leadership Assessment with 360-Performance Ratings*

360 degree performance appraisal processes gather performance ratings from multiple sources (e.g., direct reports, peers, and supervisors). All executives included in the analyses had 360-degree performance ratings within the three-year period prior to the initiation of this study. A multi-rater performance assessment focusing on leader behaviors was completed by the executive, as well as eight to ten individuals identified by the executive, including subordinates, peers, and supervisors, to provide behavioral performance ratings. The executives were assessed along the following 15 performance dimensions: (1) Demonstrate deep and broad business acumen; (2) Create competitive & innovative business plans; (3) Build customer/client-driven environment; (4) Institutionalize error free quality processes; (5) Excel at risk/reward trade-off; (6) Align enterprise capabilities; (7) Recruit and grow great talent; (8) Inspire commitment and followership; (9) Communicate crisply and candidly; (10) Instill management focus and discipline; (11) Build partnerships to achieve swift adoption; (12) Demonstrate sound judgment & act with speed; (13) Constantly raise the bar; (14) Display personal courage;

(15) Continuously learn and adapt. Each of these dimensions was measured as a single item, with a response scale that ranged from zero to seven, with higher scores indicating a higher quality of the behavior. Scores for each of the 15 behavioral dimensions were calculated by averaging across all raters. As the data was collected from the organization's records, I was unable to analyze each individual rater's evaluation for the 360 performance dimensions.

During initial examination of the data, three cases were identified where there was likely a data entry error for one of the 360 performance dimensions. Specifically, for each case the score was reported as 0.00, which would indicate that all raters assigned a score of zero to the executive. Such a scenario is quite unlikely. As such, mean substitution was used to correct these errors.

#### *Content Coding of Leadership Categories*

In order to use the 360 performance ratings to develop scores for each of three forms of transcendent leadership, 15 subject matter experts (SME) sorted each of the 360 performance dimensions into one of four categories: leadership of the organization, leadership of self, leadership of others, or not-applicable. The SMEs were doctoral graduate students from a large southeastern university. A definition of each category were provided to the subject matter experts as follows:

*Leadership of Organization:* Leads certain non-human elements of the organization including organizational strategy, structure, rules and procedures; a leader high in this quality is receptive to and understands external changes in the environment, and sets clear boundaries for organizational strategies.

*Leadership of Others:* Leads others by demonstrating transformational and authentic leadership qualities that move both direct and distant followers beyond self-interest to self-actualization; a leader high in this quality is charismatic and effective at communicating a shared vision, building cohesive teams through collaboration, and motivating and inspiring others toward a common goal.

*Leadership of Self:* Leads through one's own personal strengths including self-awareness and self-regulation and has high levels of cognitive, behavioral, and moral complexity with decision making; a leader high in this quality demonstrates deep judgment capabilities, and exhibits high levels of self-awareness, knowledge, courage, humanity, justice, temperance, and transcendence.

Inter-rater agreement was assessed with Fleiss' Kappa coefficient, which is a statistical measure of inter-rater agreement for qualitative (categorical) items when there are more than two raters (Fleiss, 1971). According to Landis and Koch (1977), a rule of thumb for evaluating Kappa is that values between 0.40 and 0.59 indicate moderate inter-rater agreement, values between 0.60 and 0.79 indicate substantial agreement, and values above 0.80 indicate outstanding agreement. For the current analysis, 10 of the 15 dimensions had Kappas above .60. These ten dimensions were retained as indicators for the three leadership categories. Leadership of the organization consisted of four performance dimensions including: Demonstrates deep and broad business acumen, Instill management focus and discipline, Align enterprise capabilities, and Institutionalize error free quality processes. Leadership of Others included the three performance dimensions of Recruit and grow great talent, Inspire commitment and followership, and Communicate crisply and candidly. Leadership of Self was comprised of three

performance dimensions including: Demonstrate sound judgment & act with speed, Display personal courage, and Continuously learn and adapt.

To empirically evaluate the content sorting, I performed a confirmatory factor analysis in which the 10 dimensions were used as indicators of three transcendent leadership latent variables. The results indicated a poor fit of the data to the model ( $\chi^2 = 302.24$ ,  $p < .001$ , RMSEA = .13, GFI = .89, and CFI = .96). Next, I performed an exploratory principal axis factor analysis with oblique rotation on the scores for the 10 dimensions. The Kaiser rule (Kaiser, 1960) and the scree plot indicated that only a single factor should be extracted. As such, there no empirical support for these ten dimensions as representative of the three aspects of leadership discussed by Crossan et al. (2008). However, despite this lack of empirical support, I will continue to use the results from the SME content coding of three categories for all remaining analyses. New variables were created based on the SME codings to represent each of the transcendent leadership categories by summing the 360- performance dimensions associated with each.

### *Recession Awareness*

As mentioned previously, the U.S. experienced a recession starting in 2007. In September 2008 the recession appeared to hit its deepest point (Walther, 2009) and was also a time when individuals began to recognize the gravity of the recession. As such, I used this point as a marker for recession awareness. For the current study, I have separated time into two separate eight month periods, January 2008 to September 2008 (Pre-recession awareness) and October 2008 to June 2009 (Post-recession awareness). A dichotomous recession awareness variable was created where executives who left prior to

September 2008 were coded 1 and executives who left after September 2008 were coded as 0.

### *Turnover*

Company records were used to determine executives' current employment status. Participants were (1) still employed with the organization (81.6%), (2) had voluntarily terminated their employment (6.5%), or (3) had involuntarily been terminated from employment (11.9%). A voluntary turnover variable was created where 0 represents all current employees and 1 represents people who voluntarily terminated their employment with the company. For this variable, executives whose turnover was involuntary were excluded. Likewise, an involuntary turnover variable was created where 0 represents all current employees and 1 represents executives who involuntarily left the organization. For this variable, executives whose turnover was voluntary were excluded.

## RESULTS

### Hypotheses Results

Table 2 displays the overall descriptive statistics, reliabilities, and intercorrelations for the transcendent leadership categories across all three employment groups. As shown, the performance ratings across all transcendent leadership categories were highly correlated ranging from .68 to .77. Provided the previous analysis indicating a single factor for the performance ratings and that a halo effect is typically found with multisource ratings (Bates, 2002), high correlations among the variables were to be expected. Zero order correlations were used to test Hypotheses 1 through 4. Hypothesis 1 stated that voluntary turnover would be more likely for executives high in leadership of others. While the correlation was in the expected direction ( $r = .08$ ), it was not statistically significant. Therefore, Hypothesis 1 was not supported. Hypothesis 3 suggested that voluntary turnover would be less likely for executives who are high in leadership of the organization. This hypothesis was supported ( $r = -.09, p < .05$ ). As predicted, executives with low ratings on the leadership of others ( $r = -.14, p < .01$ ) and leadership of the organization ( $r = -.21, p < .01$ ) were more likely to leave the organization. Thus, Hypothesis 2 and 4 were supported. While no direct hypotheses were provided for leadership of self, the correlations indicate that while voluntary leavers did not differ significantly from those who stayed at the organization on this category ( $r = -.03, p > .05$ ), the involuntary turnover group was statistically significantly lower than the currently employed group ( $r = -.25, p < .01$ ).

#### *Moderated Logistic Regression*

Moderated logistic regression analyses were performed to determine whether the

relationship between the transcendent leadership categories and turnover depends on recession awareness. To create distinct samples for the two recession awareness time periods, I randomly assigned individuals who were still employed by the organization to either the pre-awareness or post-awareness samples (this was unnecessary for the individuals who turned over as I used the date of their turnover to identify the group to which they belonged).

In Step 1, the two main effects (i.e., transcendent leadership category and recession awareness) were entered into the regression equation. Scores on the transcendent leadership categories were centered prior to performing the regression analysis (Cohen, Cohen, West, & Aiken, 2003). In Step 2, the transcendent leadership category by recession awareness interaction was entered. In addition, diagnostic checks for influential observation and nonlinearity were conducted with no problems detected.

Hypothesis 5 stated that recession awareness would moderate the relationship between voluntary turnover and leadership of others such that the positive relationship would be stronger in the post-recession awareness timeframe. As shown in Table 4, while the main effects model was not statistically significant ( $\chi^2 = 3.12$ ,  $df = 2$ ,  $p > .05$ ), the interaction term in the second step was a statistically significant predictor ( $B = 1.99$ ,  $p < .05$ ) and significantly improved the model. The interaction of leadership of others and recession awareness can be interpreted to mean that during the pre-recession awareness time period, for each unit increase from the average in leadership of others, there is a .06 or 6% drop in the likelihood of voluntarily leaving the organization. However, in the post-recession awareness time period, for each unit increase above the average in leadership of others, there is a 6.30 or 630% increase in the likelihood of voluntarily

leaving the organization. In other words, those with higher ratings of leadership of others are more than six times more likely to leave the organization in the post-recession awareness time period than in the pre-recession time period. Therefore, in support of Hypothesis 5, these results indicate that the effect of leadership of others and recession awareness is greater for executives who voluntarily quit in the post-recession awareness time period than it is for those in the pre-recession awareness time period.

Hypothesis 6 suggested that leadership of others would have a stronger relationship to involuntary turnover in the post-recession awareness period. The main effects model was statistically significant and indicated that when holding the recession awareness variable at a fixed value, for every unit increase above the average in leadership of others, there is a 65% decrease in the odds of being in the involuntary turnover group versus the currently employed group. However, as shown in Table 3, the interaction term did not statistically significantly improve the fit of the model ( $\Delta\chi^2 = 0.09$ ,  $\Delta df = 1$ ,  $p > .05$ ). Therefore, Hypothesis 6 was not supported.

Hypothesis 7 stated that recession awareness would moderate the relationship of leadership of the organization and voluntary turnover such that the negative relationship would become positive in the post-recession awareness timeframe. As demonstrated in Table 4, Hypothesis 7 was not supported as the interaction effect ( $B = .38$ ,  $p > .05$ ) did not statistically significantly contribute to the model fit. Hypothesis 8 suggested that leadership of the organization would have a stronger relationship to involuntary turnover in the post-recession awareness timeframe. However, the interaction term was not a statistically significant predictor ( $B = -.40$ ,  $p > .05$ ). Therefore, Hypothesis 8 was not supported.

## Discriminant Function Analysis

To further understand executive turnover, I analyzed the data using a multivariate statistic technique called discriminant function analysis (DFA). DFA is a multivariate technique for considering latent dimensions of one or more normally distributed independent variables for predicting group membership in the categorical dependent variable. Essentially, the purpose of DFA is to predict group membership from a set of predictors (Tabachnick & Fidell, 2005). DFA has been successfully used in previous turnover studies (Stumpf & Dawley, 1981; Wells & Muchinsky, 1985) and can be a helpful follow-up technique for other multivariate analysis by providing information about group separation as well as the underlying dimensionality of the variables (Borgen & Seling, 1978).

While DFA allows group sample sizes to be unequal, problems can ensue when the sample size of one of the groups is very small and as a rule of thumb the smallest sample size should at least be 20 for fewer than 5 predictors (Tabachnick & Fidell, 2001). Therefore, the current analyses could not be divided by time period because voluntary turnover group only had a sample size of 17 in each time period. As such, the DFA was conducted only once across the two time periods. In addition, while no direct hypotheses were derived for leadership of the self, this category was included in the current DFA in order to better understand its relationship to the different groups.

A direct discriminant function analysis was performed using the three transcendent leadership categories as predictors of membership in the three employment groups. The results of this analysis are presented in Tables 5 through 7. With the use of a jackknifed classification procedure for the total usable sample of 523 executives, 52.6%

were classified correctly. The procedure generated two discriminant functions based on linear combinations of the predictor variables that provided the best discrimination among the groups, with a combined  $\chi^2 = 54.18$ ,  $df= 6$ ,  $p <.001$ . After removal of the first function, there was still a strong association between groups and predictors,  $\chi^2 = 15.41$ ,  $df= 2$ ,  $p <.001$ . The two discriminant functions accounted for 72% and 28% of the between-group variability, respectively.

The structure matrix (Table 6) presents the degree to which the predictor variables are correlated to each of the two discriminant functions. The matrix suggests that the best predictors for distinguishing between currently employed executives from the other two groups (first function) are leadership of the organization and leadership of self. Currently employed executives have higher ratings on leadership of the organization ( $M=5.95$ ,  $SD=.33$ ) than executives who voluntarily left the organization ( $M=5.83$ ,  $SD=.36$ ) or who involuntary left ( $M=5.74$ ,  $SD=.37$ ), and higher ratings on leadership of self ( $M=6.07$ ,  $SD=.33$ ) than the voluntary ( $M=6.03$ ,  $SD=.30$ ) or involuntary ( $M=5.81$ ,  $SD=.40$ ) groups. Loadings less than .50 are not interpreted.

One predictor, leadership of others, had a loading in excess of .50 on the second discriminant function, which appears to separate voluntary turnover from the other groups. The voluntary turnover group had the highest average rating of leadership of others ( $M=5.94$ ,  $SD=.36$ ) compared to the involuntary turnover group ( $M=5.66$ ,  $SD=.45$ ) or the currently employed group ( $M=5.82$ ,  $SD=.40$ ).

Table 7 provides the mean value of the functions for each of the groups and is presented graphically in Figure 1. Widely varying means indicate that the function contributes largely to the separation of the groups. As one would expect, the means are

most different for Function 1. As demonstrated in Figure 1, the first discriminant function maximally separates currently employed executives from the other two turnover groups. The second discriminant function discriminates voluntary turnover from involuntary turnover, with currently employed executives falling between these two groups.

#### Additional Analysis

Given that the multisource feedback instrument did not factor analyze into three transcendent leadership categories, I investigated whether a single factor of performance was related to voluntary and involuntary turnover and if it differed across the two time periods. The overall performance variable was created by computing the mean of all 15 performance dimensions. A confirmatory factor analysis was performed on the 15 dimensions as indicators of a single factor. The results indicated a good fit of the data to the model ( $\chi^2 = 131.24$ ,  $p > .05$ , RMSEA = .02, GFI = .93, and CFI = .96). Overall performance was not statistically significantly correlated with voluntary turnover ( $r = -.02$ ,  $p > .05$ ), but was correlated with involuntary turnover ( $r = -.22$ ,  $p < .001$ ). In order to test potential changes due to recession awareness, two logistic regression analyses were performed. For voluntary turnover, as shown in Table 8, neither the main effects model nor the model with the interaction term was significant. Therefore, it appears that, regardless of the economic situation, overall performance is not a statistically significant predictor of an executive's decision to leave or stay at the organization.

For involuntary turnover, the main effects model was statistically significant and indicated that when holding the recession awareness variable at a fixed value, for every unit increase above the average in overall performance, there is an 87% decrease in the odds of being in the involuntary turnover group. However, as shown in Table 8, the

interaction term did not statistically significantly improve the fit of the model ( $\Delta\chi^2 = 0.31$ ,  $\Delta df = 1$ ,  $p > .05$ ). Therefore, the relationship between overall performance and involuntary turnover remained the same across the two recession awareness time periods.

## DISCUSSION

With well over 2,000 studies on the topic, organizational turnover is an important issue for the organizational sciences (Shaw et al., 1998; Muchinsky & Morrow, 1980). The vast majority of this research has focused on what Steel and Lounsbury (2009) call “universal turnover models”, or models formed to explain the turnover across all organizational levels without regard to unique situations or circumstances. As such, this research has typically focused on samples of lower- to mid-level employees using predictors that will apply strictly to these levels in the organizational hierarchy with very little attention on the top level executives. Executives today need to manage in a far more complex and uncertain environment (Crossan et al., 2008). Due to the multifaceted and ambiguous environment in which executives operate (Crossan et al., 2008), the responsibilities and performance requirements of this group are unique and require special consideration. The present research, using data from a sample of executives within a large financial institution, addressed the need for identifying specific predictors to better understand the reasons underlying executive level turnover. In contrast to other executive turnover studies that have combined both voluntary and involuntary turnover, in the current research I considered how both micro- and macro-oriented variables were related to voluntary and involuntary turnover separately.

The current study used Crossan et al.’s (2008) transcendent leadership framework to represent executive performance. This framework is a meta-theory of leadership that serves to integrate previous leadership theories and help explain the unique performance requirements of those individuals at the top-levels within an organization. In the current

paper I explored how the transcendent leadership categories of leadership of others and leadership of the organization would be related to executive turnover.

Unfortunately, while the organization's 360 performance dimensions did sort into the three transcendent leadership categories based on the SME content coding task, no empirical support (i.e., through factor analyses) was provided for the three categories. As such, all results and analyses regarding the transcendent leadership categories must be questioned as there was no construct validity evidence for the measures I used to represent the leadership categories. Therefore, extreme caution is warranted in interpreting these findings and in generalizing these results to other organizations.

#### Measurement/Analysis Issue or Theoretical Issue

Several of my hypotheses were not supported by the data. In situations like this, it is imperative to ask whether the lack of support was due to faulty hypotheses or issue with the data and analyses that precluded a fair examination of those hypotheses. For the current research, both issues need to be addressed and recognized. As such, the following sections provide a summary of both the measurement/analysis issues and theoretical issues with future recommendations to address these limitations.

#### *Measurement/Analysis Issues*

I believe that the primary issue in the current study was not one of theory but one of measurement/analysis. In order to address this issue, my first recommendation for future research is to create a construct valid measure of transcendent leadership (Crossan et al., 2008). In order to develop the measure, a better understanding of the differences among the transcendent leadership categories should be defined. As such, future research on transcendent leadership should first attempt to carefully define and develop a

nomological net of each of the categories of transcendent leadership as well as the transcendent leadership construct. Once the construct of transcendent leadership has been clearly defined, a measure can be developed and validated through the testing of the hypothesized relationships from the nomological net. Should a construct valid measure of the leadership categories be created, I believe that research investigating the hypotheses presented in the current paper would ultimately lead to greater evidence in support of their viability.

A second measurement issue is tied to the collection of the 360 performance ratings. Relationships of 360 performance ratings with turnover should be interpreted with caution, as they reflect data that were collected in a 3 year time span prior to the initiation of the study. Since the hypotheses were derived within a certain time period regarding a specific event, this 3 year period may not have represented the executive's current levels of performance. As such, the relationship of performance and turnover may have had too long of a lag in time between assessments to indicate any type of relationship. Future researchers should assess performance ratings within a year of the executive leaving the organization as it would provide a better indication of the relationship. Alternatively, researchers could also investigate a collection of previous performance ratings over many years in order to have a more collective assessment of the executive's performance, examining whether changes in performance are indicative of potential for turnover.

Another issue with the current study is that the relationship between performance and turnover was assumed to be linear. For voluntary turnover, individual performance and turnover were unrelated. While the exact reason for this finding can only be inferred,

it may support Jackofsky's (1984) assertion that voluntary turnover and performance would have a U-shaped, curvilinear relationship. Jackofsky (1984) predicted that performance and turnover would be inversely related for poor performers, who experience a perceived threat of firing, unrelated for average performers, and positively related for good performers, who have better employment opportunities. Future research needs to consider testing this hypothesis with an executive sample to see if the relationship between executive performance and voluntary turnover is curvilinear.

Since the current data were collected from an archival organizational database, the 360 performance ratings were provided as the average across all raters, and I was unable to separate the 360 performance ratings by source. As such, future researchers should consider investigating the differences in the relationships of 360 performance ratings with turnover by type of rater. For example, supervisor ratings may be a better indicator of leadership of the organization while peer and direct report ratings may provide a better indicator of leadership of others. I also looked at the extent to which the relationships between overall performance and turnover were moderated by recession awareness. The results indicated that the recession awareness variable did not moderate the relationship between overall performance and either voluntary or involuntary turnover. However, given the small turnover sample sizes for each of the two time periods, my analyses may have suffered from a lack of power to detect an effect of recession awareness should there have been one. Future researchers could consider investigating the relationship with a longer time period before and after recession awareness to obtain a larger size of executives.

In addition, the small sample of executives that actually left the organization (Voluntary n=34; Involuntary n=62) may be viewed as a limitation of the current study. Taking this into consideration, the low number of executive's that actually leave organizations in general may be a problem in exploring turnover with this sample of employees and is not just specific to this particular study. Moreover, this sample of executives was representative of only one company that is a financial institution, and specific findings from this study may not generalize to other executive populations. As such, generalizations should be made with discretion.

### *Theoretical Issues*

The hypotheses derived in the current study were based on a strong foundation of previous empirical and theoretical work. Therefore, while I believe that the study suffered from primarily measurement issues, certain theoretical issues of the transcendent leadership and recession awareness variables need to be addressed. In the following sections, I provide some of the issues with the theory and some recommendations for future research in these areas.

*Leadership of Others.* The current study found that leadership of others was related to voluntary turnover when executives had high ratings and related to involuntary turnover when executives had low ratings. This finding suggests that organizations that are attempting to select and retain their executives may want to consider hiring executives who are in the middle on scores of leadership of others. However, this is not the case and instead organizations should select those individuals who are high in leadership of others and find incentives that will help to retain those executives. Since

leadership of others is one aspect of overall executive performance, higher performing executives should be desired.

*Leadership of the Organization.* One issue with assessing the relationship of leadership of the organization with turnover is that there may be covariates that are influencing the relationship. Specifically, organizational tenure may be associated with high leadership of the organization since these individuals are likely to have a deeper knowledge of the organization's culture, structure, and strategy. Therefore, future studies looking at the relationship of leadership of the organization with executive turnover or other variables of interest should investigate the impact of tenure on leadership of the organization and control for this time when investigating the relationship of executive performance with turnover.

*Leadership of Self.* As mentioned previously, leadership of self is the least defined of the three categories and also seems to be highly related to the other two categories (i.e., all three reference self-awareness and regulation) and also does not seem to be directly tied to the executive level. Since no hypotheses were provided for leadership of self, it remains to be seen as to how this leadership category would be related to executive turnover. Previous research has shown that one important aspect of leadership of self, self-awareness that is measured as self-other agreement on ratings, is related to individual outcomes such as performance and promotability (Bass & Yammarino, 1991; Atwater, Ostroff, Yammarino, & Fleenor, 1998). Individuals with discrepant ratings from others may not understand how they are perceived and not know their own strengths and development needs. A study by Atwater and Yammarino (1992) found that performance evaluations were positively related to leadership ratings for in-agreement estimators, but

not for those who under- or over-estimate their own performance. In addition, recommendations for promotion were negatively related to leadership for over-estimators. Given that the 360 data were averaged across the rating sources, I was unable to test whether self-awareness, measured as the discrepant ratings of self and others, was related to voluntary and involuntary turnover. Future researchers should investigate the relationship of leadership of self and turnover by investigating the discrepancies from raters with 360 performance ratings.

*Recession Awareness.* A potential contribution of this study is the development and exploration of the recession awareness variable. Previous research investigating the impact of economic conditions on turnover have used objective measures directly tied to financial and labor-market conditions, such as stock market prices and unemployment rates. In the current study, recession awareness was directly tied to the events that occurred in mid-September 2008, and I used a subjective measure of when individuals in the United States came to realize they were in a recession and economic downturn. Since recession awareness has not been considered in previous research and the variable was dichotomized based on inferences of when the recession seemed to become most apparent rather than on the basis of objective data, future research should consider exploring how major events can influence public perception and how this awareness can impact turnover decisions. In addition, the events in September 2008, while impacting other organizations, may have had more of a direct influence on financial institutions. As such, the recession awareness variable may be a more industry-specific construct. Future research should investigate how different economic and organizational events that create awareness in the public will impact executive turnover. For example, an event that

creates negative publicity for an organization may have an interesting effect on turnover similar to how the recession awareness variable did for the financial industry. Future research should investigate how public perceptions and awareness of events impact organizations and organizational members decisions on turnover.

### *Other Issues and Findings*

Despite the limitations, there are a few contributions of the present study. First, the current research supports the separation of executive turnover into those who voluntarily and involuntarily leave the organization. The failure of previous executive-level studies to separate these two types of turnover may mask the relationships of different predictors with turnover. The fact that there were differences in the magnitude and direction of relationships between performance and voluntary and involuntary turnover supports the retention of separate forms of turnover in future executive-level turnover studies.

In addition, given the lack of support for the three aspects of executive performance, I decided to examine the relationship between overall executive performance, as represented in the self-ratings of the 15 multisource competencies, and the two forms of turnover. For involuntary turnover, the results support previous research indicating a negative relationship between individual performance and involuntary turnover (Barrick et al., 1994; Bycio et al., 1990; LaRocco et al., 1977; Stumpf & Dawley, 1981; Wanous et al., 1979; Wells & Muchinsky, 1985). It appears that this negative relationship is not limited to lower-level employees and also applies to those in the upper-ranks of the organization. In a practical sense, this finding is supportive of organizational turnover decisions as it suggests that the involuntary turnover in the

current sample could be considered “functional” (Campion, 1991; Dalton et al., 1981) in that the weaker performers are dismissed from the organization.

With the concerns and warnings regarding interpretation and generalization of the results for transcendent leadership duly noted, there is a key finding that I would like to highlight relating directly to the question of executive performance for those who stay versus those who voluntarily leave an organization. As an individual moves up in an organization, the ability to lead others and work well with teams becomes increasingly important. As demonstrated in the discriminant function analysis, executives who voluntarily left the organization were rated much higher in leadership of others than those who stayed or involuntarily left the organization. In addition, the logistic regression analysis indicated that during the post-recession awareness timeframe, those individuals with higher ratings on leadership of others were more likely to leave the organization than they were in the pre-recession timeframe. In support of previous research that emphasizes the importance of developing relationships and leading and inspiring others (Bono & Anderson, 2005; Brass, 2001; Burt, 1997; Zaccaro & Klimoski, 2001), these findings suggest that executives who are capable of effectively leading others and display relationship-building behavioral qualities may have an advantage at finding employment elsewhere, even during times of economic tribulations.

Finally, another strength of the current study is the exploration of how individual and situational factors interact to influence turnover decisions. As Thornton and Ocasio (1999) note, the impact of the environment and other macro-level predictors is underemphasized in studies of executive turnover. To address this gap, I explored how economic conditions could interact with executive performance to cause turnover. Future

research should attempt to further clarify and integrate micro and macro-level variables in understanding executive-level turnover.

### *Concluding Comments*

What is largely missing in the existing turnover literature is a systematic framework and analysis of how executive performance requirements and economic conditions could impact individual and organizational turnover decisions. I believe that Crossan et al.'s (2008) transcendent leadership represents one of the best frameworks for understanding executive level performance and leadership to date. Given the prior research on executives and the performance requirements in today's complex environment, it seems justifiable that these aspects of performance would be related differently to turnover. However, as mentioned previously, a major limitation of the study design was the lack of construct validity evidence for the 360 measure of executive performance as representative of the three transcendent leadership categories. Future research should continue to examine the measurement of transcendent leadership and its relationship with turnover.

## REFERENCES

- Abbasi, S.M., Hollman, K.W. (2000). Turnover: The real bottom line. *Public Personnel Management, 29*, 333-342.
- Allen, D.G., & Griffeth, R. W. (2001). Test of a mediated performance-turnover relationship highlighting the moderating roles of visibility and reward contingency. *Journal of Applied Psychology, 86*, 1014-1021.
- Avolio, B.J., Gardner, W.L., Walumbwa, F.O., Luthans, F., & May, D.R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *Leadership Quarterly, 15*, 801–823.
- Barrick, M.R., Mount, M.K., & Strauss, J. P. (1994). Antecedents of involuntary turnover due to a reduction in force. *Personnel Psychology, 47*, 515-535.
- Bass, B.M. (1985). *Leadership and performance beyond expectations*. New York: The Free Press.
- Bates, R. (2002). Liking and similarity as predictors of multi-source ratings. *Personnel Review, 31*, 540-552.
- Becker, J., Stolberg, S.G., & Labaton, S. (2008, December 21). White House philosophy stoked mortgage bonfire. *New York Times*, Retrieved from <http://www.newyorktimes.com> on January 22, 2010.
- Bettis, R. A., & Hitt, M. A. (1995). The new competitive landscape. *Strategic Management Journal, 16*, 7–19.
- Bono, J. E., & Anderson, M. H. (2005). The advice and influence networks of transformational leaders. *Journal of Applied Psychology, 90*, 1306–1314.
- Borgen, F.H., & Seling, M.J. (1978). Uses of discriminant analysis following MANOVA: Multivariate statistics for multivariate purposes. *Journal of Applied Psychology, 63*, 689-697.
- Brass, D.J. (2001). Social capital and organizational leadership. In S.J. Zaccaro & R.J. Klimoski (Eds.) *The nature of organizational leadership: Understanding the performance imperatives confronting today's leaders* (pp. 132-152). San Francisco: Jossey-Bass.
- Bordo, M.D. (2008). An historical perspective on the Crisis of 2007-2008. NBER Working Paper 14221, National Bureau of Economic Research, Inc.

- Burt, R.S. (1997). The contingent value of social capital. *Administrative Science Quarterly*, 42, 339-365.
- Bycio, P., Hackett, R.D., & Alvares, K.M. (1990). Job performance and turnover: A review and meta-analysis. *Applied Psychology: An International Review*, 39, 47-76.
- Carsten, J.M., & Spector, P. E. (1987). Unemployment, job satisfaction, and employee turnover: A meta-analytic test of the Muchinsky model. *Journal of Applied Psychology*, 72, 374-381.
- Charmie, R.A., Sturman, M.C., & Walsh, K. (2007). Executive career management: Switching organizations and the boundaryless career. *Journal of Vocational Behavior*, 71, 359-374.
- Crossan, M., Vera, D., & Nanjad, L. (2008). Transcendent leadership: Strategic leadership in dynamic environments. *Leadership Quarterly*, 19, 569-581.
- DeConinck, J.B., & Stilwell, C.D. (2004). Incorporating organizational justice, role states, pay satisfaction and supervisor satisfaction in a model of turnover intentions. *Journal of Business Research*, 57, 225-231.
- Dreher, G.F. (1982). The role of performance in the turnover process. *Academy of Management Journal*, 25, 137-147.
- Farrell, D., & Rusbult, C.E. (1981). Exchange variables as predictors of job satisfaction, job commitment, and turnover: The impact of rewards, costs, alternatives, and investments. *Organizational Behavior & Human Performance*, 28, 78-95.
- Fee, C.E., & Hadlock, C.J. (2000). Management turnover and product market competition: Empirical evidence from the U.S. newspaper industry. *Journal of Business*, 73, 205-243.
- Fee, C.E., & Hadlock, C.J. (2003). Raids, rewards, and reputations in the market for managerial talent. *Review of Financial Studies*, 16, 1315-1357.
- Fleiss, J.L. (1971). Measuring nominal scale agreement among many raters. *Psychological Bulletin*, 76, 378-382.
- Frank, R. H. (1985). *Choosing the right pond: Human behavior and the quest for status*. New York: Oxford University Press.
- Geletkanycz, M.A., & Hambrick, D.C. (1997). The external ties of top executives: Implications for strategic choice and performance. *Administrative Science Quarterly*, 42, 654-681.

- Gerhart, B. (1990). Voluntary turnover and alternative job opportunities. *Journal of Applied Psychology, 75*, 467-476.
- Hambrick, D.C., Finkelstein, S. & Mooney, A.C. (2005). Executive Job Demands: New Insights for Explaining Strategic Decisions and Leader Behaviors. *Academy of Management Review, 30*, 472-491.
- Hambrick, D.C. & Mason, P.A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review, 9*, 193-206.
- Harrison, J. R., Torres, D. L. and Kukalis, S. (1988) The changing of the guard: Turnover and structural change in the top-management positions, *Administrative Science Quarterly, 33*, 211-32.
- Howard, A. (2001). Identifying, assessing, and selecting senior leaders. In S.J. Zaccaro & R.J. Klimoski (Eds.) *The nature of organizational leadership: Understanding the performance imperatives confronting today's leaders* (pp. 305-346). San Francisco: Jossey-Bass.
- Hubbard, R.G., & Palia, D. (1995). Executive pay and performance: Evidence from the U.S. banking industry. *Journal of Financial Economics, 39*, 105-130.
- Jackofsky, E.F. (1984). Turnover and job performance: An integrated process model. *The Academy of Management Review, 9*, 74-83.
- Jackson, S.E., Brett, J.M., Sessa, V.I., Cooper, D.M., Julin, J.A., & Peyronnin, K. (1991). Some differences make a difference: Individual dissimilarity and group heterogeneity as correlates of recruitment, promotions, and turnover. *Journal of Applied Psychology, 76*, 675-689.
- Jacobs, T. O., & Jaques, E. (1987). Leadership in Complex Systems. *Human Productivity Enhancement, 2*, 7-65.
- Kaiser, H.F. (1960). Directional statistical decisions. *Psychological Review, 67*, 160-167.
- Katz, D., & Kahn, R.L. (1978). *The social psychology of organizations*. New York: Wile.
- Knudsen, H.K., Ducharme, L.J., & Roman, P.M. (2009). Turnover intention and emotional exhaustion "at the top": Adapting the job demands-resources model to leaders of addiction treatment organizations. *Journal of Occupational Health Psychology, 14*, 84-95.
- Lance, C.E. (1988). Job performance as a moderator of the satisfaction-turnover intention relation: An empirical contrast of two perspectives. *Journal of Organizational Behavior, 9*, 271-280.

- Landis, J. R., Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33, 159-174.
- La Rocco, J.M., Pugh, W.M., & Gunderson, K.E. (1977). Identifying determinants of retention decisions. *Personnel Psychology*, 30, 199-215.
- Leamer, E. E. (2008). What's a Recession, Anyway?. NBER Working Paper 14221, National Bureau of Economic Research, Inc. Retrieved January 21, 2010, from <http://www.nber.org/papers/w14221>.
- Luthans, F., & Avolio, B. (2003). Authentic leadership development. In K. Cameron J. Dutton & R. Quinn (Eds.), *Positive organizational scholarship* (pp. 241–258). San Francisco: Berrett-Koehler.
- Maertz, C.P. (2004). Five antecedents neglected in employee turnover models: Identifying theoretical linkages to turnover for personality, culture, organizational performance, occupational attachment, and location attachment. In Griffeth, R. & Hom, P. (Eds.), *Innovative theory and empirical research on employee turnover* (pp. 105-151). Greenwich, CT: Information Age Publishing.
- March, J.G., & Simon, H.A. (1958). *Organizations*. New York: Wiley.
- Michaels, C.E., & Spector, P. E. (1982). Causes of employee turnover: A test of the Mobley, Griffeth, Hand, and Meglino model. *Journal of Applied Psychology*, 67, 53-59.
- Mobley, W. H., Griffeth, R. W., Hand, Herbert H., & Meglino, B.M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin*, 86, 493-522.
- Muchinsky, P.M., & Morrow, P.C. (1980). A multidisciplinary model of voluntary employee turnover. *Journal of Vocational Behavior*, 17, 263-290.
- Norris, F. (2009). Plunging markets, then and now. *NYTimes.com*, Retrieved January 21, 2010 from <http://norris.blogs.nytimes.com/2009/03/05/plunging-markets-then-and-now>.
- Osborn, R. N., Hunt, J. G., & Jauch, R. (2002). Toward a contextual theory of leadership. *Leadership Quarterly*, 13, 797–837.
- Peterson, C., & Seligman, M. (2004). *Character strengths and virtues: A handbook and classification*. New York: Oxford University Press.
- Porter, L. W., & Steers, R.M. (1973). Organizational, work, and personal factors in employee turnover and absenteeism. *Psychological Bulletin*, 80, 151-176.

- Potter, S.J. & Dowd, T.J. (2003). Executive turnover and the legal environment: The case of California hospitals, 1960-1995. *Sociological Forum*, 18, 441-464.
- Price, J.L. (2004). The development of a causal model of voluntary turnover. In Griffeth, R. & Hom, P. (Eds.), *Innovative theory and empirical research on employee turnover* (pp. 3- 32). Greenwich, CT: Information Age Publishing.
- Romanelli, E., & Tushman M.L. (1988). Executive leadership and organizational outcomes: An evolutionary perspective. In Hambrick, D.C. (Eds) *The executive effect: concepts and methods for studying top managers*, (pp. 235-264) JAI Press: Greenwich, CT.
- Russell, C.J. (2001). A longitudinal study of top level executive performance. *Journal of Applied Psychology*, 86, 560-573.
- Shaw, J. D., Delery, J.E., Jenkins, G. D., & Gupta, N. (1998). An organization-level analysis of voluntary and involuntary turnover. *Academy of Management Journal*, 4, 511-525.
- Shen, W. & Cannella, A.A. (2002). Revisiting the performance consequences of CEO succession: The impacts of successor type, postsuccession senior executive turnover, and departing CEO tenure. *Academy of Management Journal*, 45, 717-733.
- Sightler, K.W., & Adams, J.S. (1999). Differences between stayers and leavers among part-time workers. *Journal of Managerial Issues*, 11, 110-125.
- Smith, B.N., Montagno, R.V., & Kuzmenko, T.N. (2004). Transformational and servant leadership: Content and contextual comparisons. *Journal of Leadership and Organizational Studies*, 10, 80-91.
- Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology*, 30, 526-537.
- Soros, G. (2008). *The new paradigm for financial markets: The credit crisis of 2008 and what it means*. New York: Public Affairs Inc.
- Staw, B.M., Barsade, S.G. & Koput, K.W. (1997). Escalation at the credit window: A longitudinal study of bank executives' recognition and write-off of problem loans. *Journal of Applied Psychology*, 82, 130-142.
- Steel, R. P., & Ovalle, N.K. (1984). A review and meta-analysis of research on the relationship between behavioral intentions and employee turnover. *Journal of Applied Psychology*, 69, 673-686.

- Steel, R. P., & Lounsbury, J.W. (2009). Turnover process models: Review and synthesis of a conceptual literature. *Human Resource Management Review, 19*, 271-282.
- Stumpf, S. A., & Dawley, P. K. (1981). Predicting voluntary and involuntary turnover using absenteeism and performance indices. *Academy of Management Journal, 24*, 148-163.
- Tabachnick, B.G., & Fidell, L.S. (2001). *Using multivariate statistics, 4<sup>th</sup> ed.* Needham Heights: Allyn & Bacon.
- Thomasson, L. & Stanton, E. (2008, September 16). Stocks plummet on concerns of recession. *Bloomberg News*. Retrieved January 22, 2010 from <http://www.bloombergnews.com>.
- Timmerman, T.A. (1997). A closer look at personality characteristics of outplaced executives. *Journal of Business and Psychology, 12*, 55-66.
- Timmerman, T.A. (2006). Predicting turnover with broad and narrow personality traits. *International Journal of Selection and Assessment, 14*, 392-399.
- Trevor, C. O. (2001). Interaction among actual ease-of-movement determinants and job satisfaction in the prediction of voluntary turnover. *Academy of Management Journal, 44*, 621-638.
- Wagner, W.G., Pfeffer, J., & O'Reilly, C.A. (1984). Organizational demography and turnover in top management groups. *Administrative Science Quarterly, 29*, 74-92.
- Walumbwa, F.O., Avolio, B.J., Zhu, W. (2008). How transformational leadership weaves its influence on individual job performance: The role of identification and efficacy beliefs. *Personnel Psychology, 61*, 793-825.
- Wanous, J.P., Stumpf, S.A., Bedrosian, H., (1979). Job survival of new employees. *Personnel Psychology, 32*, 651-662.
- Watson, D., & Clark, L. A. (1997). Extraversion and its positive emotional core. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of personality psychology* (pp. 767-793). San Diego, CA: Academic Press.
- Weiserma, M. & Bantel, K. (1992). Top management team demography and corporate strategic change. *Academy of Management Journal, 35*, 91-121.
- Wells, D.L. & Muchinsky, P.M. (1985). Performance antecedents of voluntary and involuntary managerial turnover. *Journal of Applied Psychology, 70*, 329-336.

Zaccaro, S.J. & Klimoski, R.J. (2001). *The nature of organizational leadership: Understanding the performance imperatives confronting today's leaders*. New York: Pfeiffer.

Table 1

*Demographic Information for Executive Employment Status*

Variables	Employment Group		
	Still Employed (n= 427)	Voluntary (n= 34)	Involuntary (n= 62)
Gender (%)			
Male	73.3	82.4	80.0
Female	26.7	17.6	20.0
Race (%)			
White	87.4	82.4	82.3
Black	2.6	5.9	8.1
Hispanic/Latino	2.3	5.9	4.8
Asian	4.2	2.9	0.0
American Indian	.5	0.0	0.0
Tenure *	15.40 (9.00)	9.91 (6.95)	14.32 (9.77)

*Note.* Total N= 523; \* Mean (SD).

Table 2

*Means, Standard-Deviations, Reliabilities, and Intercorrelations among Variables*

Variables	M	SD	Correlations				
			1	2	3	4	5
<i>Transcendent Leadership</i>							
1. Leadership of Others	5.81	.41	(.79)				
2. Leadership of Self	6.04	.35	.69**	(.84)			
3. Leadership of the Organization	5.92	.34	.68**	.77**	(.81)		
<i>Dependent Variables</i>							
4. Voluntary Turnover <sup>a</sup>	.07	.26	.08	-.03	-.09*	--	
5. Involuntary Turnover <sup>b</sup>	.13	.33	-.14**	-.25**	-.21**	--	--

*Note.*  $N=523$  for the transcendent leadership variables; <sup>a</sup>  $N = 461$  for Voluntary Turnover (0 = still employed, 1 = terminated voluntarily); <sup>b</sup>  $N = 489$  for Involuntary Turnover (0 = still employed, 1 = terminated involuntarily); \* $p < .05$ . \*\* $p < .01$

Table 3

*Logistic Regression for Turnover with Leadership of Others and Recession Awareness*

Model	Predictor	Voluntary Turnover				Involuntary Turnover			
		B	SE B	Wald	Odds Ratio	B	SE B	Wald	Odds Ratio
Step 1	Leadership of Others	0.85	0.50	2.92	2.35	-1.07**	0.33	10.53	0.35
	Recession Awareness	-0.17	0.37	0.22	0.84	0.75*	0.29	6.52	2.11
	Constant	-2.49**	0.25	96.28	0.08	-2.43**	0.24	102.03	0.09
	Model $X^2$ (df)			3.12 (2)				15.37 (2)**	
Step 2	Leadership of Others	-0.06	0.65	0.01	0.94	-0.94	0.53	3.11	0.39
	Recession Awareness	-0.39	0.42	0.87	0.67	0.72*	0.31	5.46	2.05
	Awareness x Leadership of Others	1.99*	1.02	3.84	7.30	-0.20	0.68	0.09	0.82
	Constant	-2.50**	0.26	94.96	0.08	-2.41**	0.25	91.88	0.09
	Model $X^2$ (df)			7.05 (3)				15.46 (3)**	
	$\Delta$ Model $X^2$ ( $\Delta$ df)			3.93 (1)*				0.09 (1)	

Note. Hypothesis 5:  $N=427$ , Hypothesis 6:  $N=489$ . Reference category for DV is Currently Employed group. Reference category for Recession Awareness is Pre-Recession Awareness. \* $p < .05$ . \*\* $p < .01$ .

Table 4

*Logistic Regression for Turnover with Leadership of the Organization and Recession Awareness*

Model	Predictor	Voluntary Turnover <i>Hypothesis 7</i>				Involuntary Turnover <i>Hypothesis 8</i>			
		B	SE B	Wald	Exp(B)	B	SE B	Wald	Exp(B)
Step 1	Leadership of the Organization	-1.05*	0.53	3.92	0.35	-1.86**	0.40	21.27	0.16
	Recession Awareness	-0.01	0.36	0.00	1.00	0.66*	0.29	5.15	1.94
	Constant	-2.58**	0.26	97.65	0.08	-2.46**	0.24	102.98	0.09
	Model $X^2$ (df)			3.88 (2)				27.06** (2)	
Step 2	Leadership of the Organization	-1.24	0.76	2.69	0.29	-1.59*	0.69	5.26	0.20
	Recession Awareness	0.04	0.38	0.01	1.04	0.60	0.32	3.63	1.83
	Awareness x Leadership of the Organization	0.38	1.06	0.13	1.46	-0.40	0.85	0.21	0.67
	Constant	-2.61**	0.27	90.275	0.07	-2.42**	0.25	91.49	0.09
	Model $X^2$ (df)			4.01 (3)				27.27** (3)	
	$\Delta$ Model $X^2$ ( $\Delta$ df)			0.13 (1)				0.21 (1)	

*Note.* Hypothesis 7:  $N=427$ , Hypothesis 8:  $N=489$ . Reference category for DV is Currently Employed group. Reference category for Recession Awareness is Post-Recession Awareness. \* $p < .05$ . \*\* $p < .01$

Table 5

*Results of Multiple Discriminant Analysis for Leadership Categories and Employment Groups*

Function	Eigenvalue	% of common variance	$X^2$	<i>df</i>	Canonical correlation	<i>p</i>
I-II	0.08	72.0	54.18	6	0.27	>.001
II	0.03	28.0	15.41	2	0.17	>.001

Notes. *N* = 523.

Table 6

*Structure Matrix: Loadings of each Leadership Category on Discriminant Functions*

Leadership Style	Function	
	1	2
Leadership of Organization	0.79 <sup>+</sup>	0.08
Leadership of Others	0.34	0.73 <sup>+</sup>
Leadership of Self	0.87 <sup>+</sup>	0.50

Notes. *N* = 523 <sup>+</sup> Loadings greater than .50 are interpreted.

Table 7

*Discriminant Functions for Group Centroids*

Group	Function	
	1	2
Still Employed	0.13	-0.02
Voluntary Turnover	-0.38	0.61
Involuntary Turnover	-0.68	-0.21

Notes. *N* = 523.

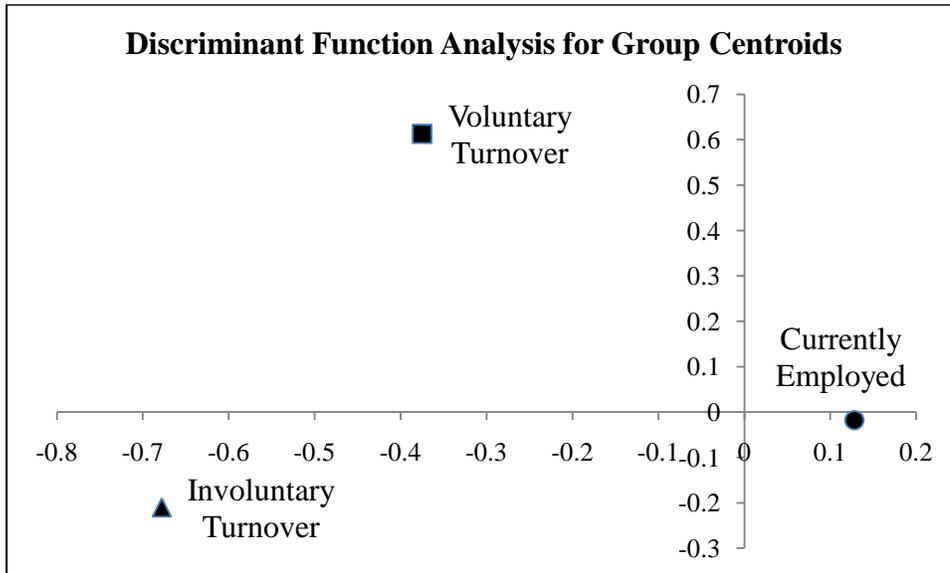
Table 8

*Logistic Regression for Turnover with Overall Performance and Recession Awareness*

Model	Predictor	Voluntary Turnover				Involuntary Turnover			
		B	SE B	Wald	Odds Ratio	B	SE B	Wald	Odds Ratio
Step 1	Overall Performance	-0.23	0.57	0.17	0.97	-2.07**	0.42	24.11	0.13
	Recession Awareness	-0.03	0.36	0.01	0.79	0.76*	0.30	6.59	2.14
	Constant	-2.52	0.26	97.55	0.08	-2.53**	0.25	103.34	0.08
	Model $X^2$ (df)			0.19 (2)				30.28 (2) **	
Step 2	Overall Performance	-0.71	0.81	0.76	0.49	-1.77*	0.69	6.69	0.17
	Recession Awareness	-0.01	0.37	0.01	0.99	0.68*	0.32	4.39	1.97
	Awareness x Performance	0.93	1.14	0.65	2.52	-0.49	0.87	0.31	0.61
	Constant	-2.55	0.27	92.73	0.08	-2.48**	0.26	89.02	0.08
	Model $X^2$ (df)			0.84 (3)				30.59 (3)**	
	$\Delta$ Model $X^2$ ( $\Delta$ df)			0.65 (1)				0.31 (1)	

*Note.* Voluntary Turnover Analysis:  $N=427$ , Involuntary Turnover Analysis:  $N=489$ . Reference category for DV is Currently Employed group. Reference category for Recession Awareness is Pre-Recession Awareness. \* $p < .05$ . \*\* $p < .01$ .

Figure 1  
*Discriminant Function Analysis for Group Centroids*



*Note.* Function 1 is plotted along X-axis (horizontal). Function 2 is plotted along Y-axis (vertical).